

University

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HIMACHAL PRADESH UNIVERSITY EIGHTH ANNUAL CONVOCATION

20 DECEMBER 1983



Shri Hokeshe Sema (centre) Governor of Himachal Pradesh and Chancellor of Himachal Pradesh University
at the Eighth Annual Convocation of the University

**INDIAN INSTITUTE OF
TECHNOLOGY, BOMBAY**
P O III POWAI BOMBAY-400076
Advertisement No. A-168/83

Applications are invited for the following permanent posts at this Institute in the prescribed form obtainable free of charge from the Registrar, Indian Institute of Technology, P O III, Powai, Bombay-400 076, on request accompanied by (i) a addressed envelope (25 cm x 10 cm). Applicants should give an account of their academic and professional record and list of research publications. Persons employed in Government/Semi-Government Organisations or Educational Institutions should apply through proper channel. Indian candidates should may apply on plain paper in duplicate. The posts carry allowances such as D.A., C.C.A., H.R.A. as per rules of the Institute which at present correspond to those admissible to the Central Government employees stationed at Bombay. Depending on qualifications and experience, higher salary may be offered. A candidate may be considered for a lower position of a lecturer if not recommended for the post of Assistant Professor. Completed applications should reach the Registrar, IIT, Powai, Bombay-400 076, on or before 31st January 1984.

Some posts of Lecturer are reserved for the candidates belonging to SC/ST community.

Assistant Professor Scale of Pay: Rs. 1200-50-1300-60-1900.

Lecturer Scale of Pay: Rs. 700-40-1100-50-1600.

Total emoluments on the minimum of the scale excluding H.R.A.

On basic pay Rs. 1200 total emoluments Rs. 2345/-

On basic pay Rs. 700 total emoluments Rs. 1589.37

1. Department of Chemistry

Qualifications & Experience

Assistant Professor

Applicant should have consistently excellent academic record with Doctorate degree in the appropriate field from a recognised University/Institute. Minimum 5 years experience in teaching and research after obtaining Ph.D. degree. Specialised knowledge in one or more specified fields. Experience of carrying out independent research and guiding research desirable.

Lecturer

Applicant should have consistently excellent academic record with doctorate degree in the appropriate field from a recognised University or Institute with two years research experience.

Fields of Specialisation

Inorganic spectroscopy structural inorganic chemistry Organometallics

bio-organic chemistry photochemistry organic synthesis polymer chemistry theoretical chemistry thermodynamics and electrochemistry

2. Environmental Science and Engineering Group

Qualifications & Experience

Assistant Professor in

(1) Environmental Engg.

(2) Environmental Sciences (Environmental Microbiology)

Consistently good academic record with a Doctorate degree in the relevant field. About 5 years experience in teaching and/or research and development.

Candidates not possessing Ph.D. may

also be considered if they have to their credit equivalent published research work or design/development work of high standard either in an Institution or in an Industry.

3. Bio-Medical Engineering

Qualifications & Experience

Assistant Professor-cum-Physician

(1) M.D. in Medicine from a recognised University.

(2) Nearly 10 years of clinical experience out of which at least 3 years should be in a teaching hospital in a teaching capacity.

(3) Some teaching and research experience in areas related to Biomedical Engineering like Hemorheology, wearable Artificial Kidney machine etc.

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S. No.	Name of the Posts	No. of Posts
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3	Lecturer in Civil Engineering (OU & KSMU)	Two (One)
4	Lecturer in Mechanical Engineering (KSMU)	One
5	Lecturer in Mining Engineering (KSMU)	One
6	Lecturer in Library Science	One

Scale of Pay

Professor	Rs. 1800-2800
Reader	Rs. 1200-1900
Lecturer	Rs. 700-1600

Age

Professor	Not above 50 years
Reader	Not above 40 years
Lecturers	Not above 35 years

Note

Age limit does not apply to the employees of this University. Relaxation in age to the extent of five years shall be granted to the candidates belonging to SC/ST/BCs.

14%, 4% and 25% reservations are made for SCs, STs and BCs respectively for the posts of Lecturers and Readers only.

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P. S. Ramachandran
REGISTRAR

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Editor :

M. S. RAMAMURTHY

UGC's Central Universities Panel Report

A six-member committee headed by the Chairman of the University Grants Commission, Dr. (Mrs) Madhuri R. Shah, constituted for examining the working of the Central Universities, has, after about two years of deliberations, come out with its report. Inter alia the committee examined whether the Central Universities are fulfilling the objectives set for them, the general state of discipline in them and the causes for the periodic disturbances in their campuses, adequacy of the machinery for the redressal of grievances of students, teachers, administrative staff, etc. and the desirability of evolving a code of conduct for political parties and to set limits of their involvement in university affairs. These terms of reference of the committee covered a wide spectrum of areas of activities in the Central Universities. The report naturally is wide ranging in its coverage.

University News is happy to give a summary of the main observations and recommendations made by the committee.

1 Whether the Central Universities are fulfilling the objectives set for them in their Acts and Statutes

1.1 Central Universities have to some extent pursued their academic objectives within resources available, they could have done better if they were allowed to function in a peaceful atmosphere free from agitations and strikes by different sections of the University community—students, karamcharis and in some cases even teachers. These strikes have created a perpetual crisis to the solution of which some of the recommendations are directed. The universities are a tremendous national resource for the country's future and we cannot afford to allow the present situation to continue. The leadership of the country, the intellectuals and the university community in particular, have to strain every nerve in order to bring the university system back to its creative role in our society.

1.2 Not all the Acts of the Central Universities prescribe the objectives for which they were established. Wherever these are indicated these have not been adequately fulfilled. In the Committee's view two objectives should at least have been kept in view: an all-India character of the Central Universities and pursuit of excellence by them. None of the Central Universities have been able to maintain an all India character, in the matter of admissions. It has been observed that in the case of some universities, student enrolment is only from the neighbouring areas, some time from a few districts. They give weightage to their own students for admission to subsequent courses which leads to inbreeding. The Committee found strong evidence of such inbreeding continuing in recruitment at all levels, which vitiates pursuit of excellence. Some of the universities have succumbed to pressures for admitting students far in excess of their academic or residential facilities and have thus compounded their problems reducing effectiveness in providing the highest quality of education.

1.3 The Committee has, therefore, recommended that a set of objectives should be clearly provided to the Central Universities to serve as a constant guide to the development of their educational and research programmes, and to provide a basis for judging their performance in future. The objectives could be on the following lines:

The Central Universities as institutions of national importance will endeavour to serve the purposes of human resource development and national advancement by providing a wide variety of educational programmes to suit the needs and aptitudes of the scholars with due regard to the manpower needs of the country.

The universities will endeavour to raise the quality of scholarship by all possible means and in particular by selection of students and

scholars on merit on a national basis, by designing such educational programmes which would cultivate knowledge, reflection, creativity, scientific temper and good judgement, by adopting modern methodologies of instruction and evaluation. They will strive to cultivate humane values as also the spirit of national integration and social justice.

The universities will endeavour to develop deeper understanding of natural and social environment among students and motivate them to serve the community by making projects studies and activities related to local and regional development as integral part of the relevant courses.

The universities will pursue excellence in the sphere of research and encourage research on problems connected with social, economic and cultural development. For implementing relevant courses and research programmes the universities will endeavour to establish suitable linkages with other institutions and agencies in the region.

1.4 To overcome problems arising from unplanned growth of admission, the Committee has suggested the strategy (a) to limit admission to a capacity which cannot be changed under day-to-day pressures, (b) to limit the duration for which a student may be allowed to study a course, live in the hostels and be on the rolls of the University, (c) to make admissions according to merit for which the Central Universities may conduct a suitable examination, and (d) for the UGC/Government to provide opportunity for high quality education and attractive courses of study through distance education. In this connection the setting up of National University of Distance Education has been recommended.

It has also been recommended that in the case of universities which are directly enrolling students for undergraduate courses, there should be no expansion of student enrolment, but there should be a restructuring of these courses, to improve employment opportunities and undertake experimentation and innovation. The admission capacity in the universities may be prescribed by the Statutes, so as to avoid change in the same under pressures. The Committee has also urged that the Visitor on the advice of UGC and in consultation with the University concerned may be authorised to introduce a new Statute.

1.5 The Committee has observed that the most crucial stage of recruitment for avoiding inbreeding and promoting excellence in the universities is that of lecturers. It is essential that the best talent, having aptitude for and orientation towards teaching is recruited to this post.

The constitution of the Selection Committee for making recruitment for the posts of Lecturers, Readers and Professors has been proposed as follows: Vice-Chancellor, Pro-Vice-Chancellor, a nominee of the Visitor, a nominee of the Chairman, UGC, and three experts not connected with the University to be nominated by the Vice-Chancellor in the manner prescribed.

2. General State of Discipline and Remedial Action

2.1 The Committee has observed that hardly a

week passes in the country when the news-papers do not carry some news or the other about disturbances in the Universities including Central Universities. It has carefully examined some of the incidents of student agitation and has come to the following conclusions.

(a) Agitations in the universities are launched by the Student Unions. The Unions, instead of taking up academic or genuine causes, or of contributing to the corporate life of the universities, take up populist causes and try to mobilise support. In an objective sense, their aim gets reduced to disruption of the normal functioning of the universities. Most of those who get into the leadership of the Unions are not persons of academic merit, but those who have either a long stay on the campus or have an eye on a political career for themselves, and want personal publicity. Not only this, but over the years rowdies and musclemen have come to play a very important role in agitations. Some of them could be on the rolls of the university itself, and others are plain outsiders including in some cases people with a criminal record. The mischievous groups are very small, but they are extremely aggressive and quite willing to destroy the normal tenor of decent behaviour and inter personal relationship among students, teachers and authorities in the University, and resort to intimidation and different types of violence against the administration, the Faculty members and other students. In fact, all their actions are designed to attract counter measures on the part of administration which would add fuel to the fire ultimately leading to the law and order authorities to be asked to assist the universities.

(b) We are convinced that the vast majority of students are interested in careers of a different kind and they would like to pursue their studies in all seriousness. They have respect for their teachers and they are law abiding. But the tragedy is that they are either passive or silent spectators of such incidents. They are terrified of the kind of leadership described above and either unwillingly fall in line with it or remain totally unconcerned.

(c) Over the years, the number of student enrolment is increasing. As a result, all types of persons have been enrolling themselves as students and they merely seek the benefits of being a student and the financial gain from living in hostels. Overcrowding soon leads to malpractices for gaining admission into hostels, and seeking the help of the rowdy elements towards this end. A kind of leadership is thus built up for the more vocal and the aggressive.

(d) One of the factors which causes the situation to get worse is soft decisions on the part of administration when faced with trouble of this kind.

(e) The administrative inefficiency and tardiness which prevails in most of the universities is to a certain extent responsible for such unhealthy trends on the campus. Unattended grievances tend to accumulate and build up an atmosphere in which the kind of leadership described above can exploit the situation.

[The next part of the Report
will appear in the next issue]

UNESCO GENERAL CONFERENCE

The Twenty-Second Session of the General Conference of UNESCO was held in Paris from October 25 to November 29, 1983. We give below excerpts from the Address by Mrs Sherla Kaul, Minister of State for Education, Culture & Social Welfare and leader of the Indian delegation.

“ At a time when the contemporary world is passing through a grave crisis, this General Conference of UNESCO provides us an opportunity to reflect and to plan in a concerted way on themes which are fundamental to our quest for peace, cooperation, development and fulfilment. Inflationary and adverse pressures are shattering the economies of the developing world. Mounting tensions between the power-blocs and the dangerous policy of arms race accentuate the gravity of the crisis. The reluctance of the North to extend cooperation to the South poses a threat to peace and development. We need urgent and effective solutions. And as we read through the pages of the Draft Programme and Budget presented to us by the Director-General, we feel that UNESCO has again risen to its task and given us not only a realistic appraisal of the present world situation but also formulated for our consideration significant strategies and plans of action. Indeed this document faithful to the spirit and content of the Second Medium Term Plan, has succeeded to a great extent in achieving the much desired balance between the demands of reflection and those of action, and for this I would like to compliment, most warmly, the Director-General and his colleagues in the Secretariat.

“Mr President, the persistence of racism in the modern world is a crying shame for mankind. How can the denial of freedom to the majority of the people of South Africa and people of Namibia be condoned, is a question that needs to be asked in all earnestness. Nelson Mandela, the flaming symbol of freedom and many others are behind prison bars but their voices cannot be stifled and resound the world over. I would like to submit for consideration of this Conference a possible programme under which UNESCO could provide support for publications to make international public opinion more aware of the history of the National Liberation Movements and the nature of the struggle against apartheid. This can best be done under Major Programme XII.

“Similarly it is important and urgent to explicate more clearly the fundamental contents of the ideals of peace and international understanding. Peace is not a negative concept. It does not mean a mere absence of war. Peace is a positive state which serves as the foundation of all human rights and duties and of all harmonious activities. Again, when we speak of international understanding, we do not mean mere knowledge of other countries' cultures and peoples,

nor do we mean mere exchange of students, scholars and experts among different countries important though they are. By international understanding, we mean a responsible commitment to the idea and practice of the Family of Man. In other words, international understanding implies a commitment to that mode and ideal of consciousness in which mutual dependence of each upon all and of all upon each is indispensable. It implies a harmony of consciousness in which barriers collapse and perverse tendencies of domination, exploitation and oppression wither away. These deeper implications must find explicit recognition in the contents and methods of education. Corresponding to the need for universality and unity, emphasis should be laid on a dialogue for harmonisation of the cultures of the East and the West, and of humanities, sciences, fine arts, and technology. A new orientation towards the fullness of personality through a special kind of value-education is necessary for the purpose.

“The new type of human being that we seek to fashion through education for international understanding should be able to combine in himself the qualities of the scientist and the humanist. And the important theme to which we must address ourselves in this context is that of the synthesis of science and spirituality, which seems to hold the key to the needed transformation of human consciousness. This means a deeper quest and a bolder programme of research. May I suggest that UNESCO should consider enlarging the scope of the Major Programme XIII, which should eventually lead to the formation of a Resource Centre for Education for International Understanding. The aim of such a Centre would be to assist Member-States to develop contents and methods of the proposed new dimensions of education suitable to each country's genius and cultural identity.

“UNESCO rightly rejects the view that only a few should climb the heights of knowledge and culture while the rest should remain for ever on the lower ranges of achievement. Voicing the cry of the greatest leaders of mankind, UNESCO's concern is not for a few but for *all*, and it is this concern which has a special appeal to all humankind, and particularly, to the people of developing countries. Unprecedented explosion of population and the rising figure of illiteracy call for concerted action and mutual assistance.

“A special problem that holds our attention is that of the girls' education and of the status of women.

In the recent Conference of the Ministers of Education and Culture of the Non-Aligned and other Developing Countries which was held at Pyongyang, it was declared, in the spirit of UNESCO, that "education for all designed for the integral welfare of all is the only acceptable ideal, and is imperatively necessitated by the critical times through which humanity is passing today." Along with the idea of education for all, this Conference also emphasised the idea of life-long education and recommended that opportunities and facilities be provided to all members of society by developing simultaneously preschool, school and adult education and continuing education. A special emphasis was also laid on education of women.

"The present civilisation is science-based, and there is an unprecedented explosion of knowledge. Both these factors impel us to give a fresh thought to the problems of access to knowledge and to the issues relating to communication and sciences and their application to development.

"There are, however, two or three important issues, particularly related to the advancement of scientific knowledge in all parts of the world. In the first place, we have to note the disconcerting fact that in spite of increasing access to knowledge, students of the developing countries continue to depend largely upon the developed world and the facilities which they provide in advanced science and technology at exorbitant costs. Is it not possible, we may ask, for UNESCO to remedy this situation? Secondly, the developing world has to depend a great deal on books and teaching-learning materials imported from the developed world. Often, these imported materials incite waves and tendencies that breed cultural alienation. Again, we may ask, if it is not possible for UNESCO to initiate a massive action for the production of the needed books and teaching-learning materials, through translations and adaptations, that will invigorate the twin movement of cultural identity and international understanding? There is also the issue of collaboration among the developing countries themselves not only in the domain of the transfer of scientific knowledge and technical know-how but also in the domain of cultural inter-change. I am happy to say that these questions have engaged the attention of non-aligned and other developing countries and a decision has been taken to strengthen the South-South Cooperation along with North-South cooperation in the fields of education and culture. At the same time, the need was stressed for the importance of close cooperation between non-aligned and other developing countries with UNESCO and for concerted action in major international conferences and international negotiations. It would, therefore, be gratifying if this need is reflected in various programmes for 1984-85, particularly those relating to access to knowledge, science, communication and culture.

"The major programme XI describes its thrust in its very striking title, "Culture and the Future". This futuristic thrust is imperatively demanded at a time when the whole mankind is preparing to build a new

world. We speak today of the need for a new international economic order. We also speak of the new world order. In a recent speech that the Prime Minister, Mrs. Indira Gandhi, gave at the United Nations General Assembly in her capacity as the Chairperson of the Non-aligned Movement, reference was made to the concept of a new international order of humanity. It is heartening, therefore, that the Draft Programme and Budget has called upon UNESCO to promote knowledge of culture and to encourage greater awareness and expression of cultural identity. It is also gratifying that UNESCO has taken up revision of the History of the Scientific and Cultural Development of Mankind, and to conduct studies on the impact of technological and industrial development as also, to undertake a range of activities highlighting the specificity and the universality of the values of various cultures.

"It is also heartening that due attention is proposed to be paid to the programmes relating to the youth. For youth is central to education and culture even as education and culture are central to youth. This reciprocal relationship can very well be brought about through various programmes that have been outlined in the Document 22 C 5. And I am confident that these programmes will enable us to prepare adequately for the International Year of the Youth 1985. I should like, however, to urge that special attention be paid to such programmes as Auroville in India which aim at the creation of permanent sites dedicated to the youth to unending education to international understanding and to universal harmony. The world needs today experiments of unusual dimensions not necessarily in quantitative terms, but in qualitative terms. We need to encourage in different parts of the world the coming together of people from different cultural backgrounds in order to live together and to strive together, to educate and learn from each other and to establish a new collective way of cultural interchange and harmonisation of various streams of cultural aspirations as is being attempted at Auroville. Mrs. Indira Gandhi said recently and I quote:

"We have to strive to create a new international order of humanity, where power is tempered with compassion and where knowledge and capability are at the service of all humanity."

"We also subscribe to the view that the financial constraints concerning many Member-States do not reduce but enhance the exigencies of the reinforcement of international cooperation within the framework of UNESCO's competence. Indeed, at a time, when strengthening of human spirit for the defence of peace is more necessary than ever before and when the needs of Member-States in the fields of education, science, culture and communication are more urgent than ever before, it is in the interest of the world community as a whole to strengthen UNESCO in every way possible so that the organisation in its turn can help us more effectively and thus enable us to help ourselves in meeting the challenges of national development and world peace through international cooperation."

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Himachal CM Addresses Convocation of Himachal Pradesh University

Excerpts from the Address by Shri Virbhadra Singh, Chief Minister, Himachal Pradesh, delivered on December 20, 1983 at the Eighth Annual Convocation of Himachal Pradesh University, Simla

“Two extreme viewpoints have often been urged in respect of higher education. There are those who look at it with woolly minded idealism and the vision of the classical purists. They regard education only as a source of knowledge and light, of comprehension and understanding. They treat it as an inviation to the life of a scholar delving deep into the secrets of nature and bringing forth new facts or new theories to explain the varied phenomena that stretch before us.

“At the other end of the spectrum stand those who would convert education into a technique of earning one's bread. They scoff at abstruse theories and abstract concepts. They would like education to be pragmatic and to generate skills that are immediately applicable to the mundane pursuit of the good things of life.

“As in everything else, the truth lies somewhere in the mean. Education has to combine both the elements—information and skills that lead to a livelihood, as well as the wisdom that teaches us to learn with humility and live in dynamic equilibrium with a heightened sense of alertness.

“To those of my friends who are crossing the portals of the University and entering the uncharted paths of the wide world beyond, a profession or job may appear to be the prime necessity. And in a poor country like ours where the struggle for a job or a profession is fierce, the sights are often set low. But even here, with growing prosperity, the meaninglessness of merely material pursuits becomes evident after a stage. As life discloses its myriad mysteries to the think-

ing, feeling person with an awakened mind and purified conscience, he comes face to face with the reality. His capacity to be in tune with life's innermost secrets is tested. He realizes that happiness is a state of mind, an attitude, a response to the changes in and around us.

“Having experienced life in its varied aspects of for half a century now, I would like to share an everyday truth with you. It is so common-place and self-evident yet it eludes us because we are programmed not to see it. And this truth is that a life without values is not worth living. Those who think that luxury and comfort will give them happiness find the hollowness of material possessions and become jaded and cynical. Those who spend their whole life seeking the pleasures of the body and

sensations for the mind end up bored and disillusioned. Real happiness comes to only those who do not attempt happiness for themselves. They have a definite goal in life. They live for bringing succour to the needy and solace to the wretched. Their area of compassion embraces the whole world. They work incessantly, with courage and conviction, with tenacity and devotion, day and night, for the realisation of their dreams. They have no time to be bored, unhappy or pessimistic. They flow with the river of life, giving and receiving, and in the process enriching both themselves and others.

“All this may sound blasphemous to those who, subscribe to a different world-view, where happiness is synonymous with things, gadgets, promiscuity and chemically induced euphoria. It is my deepest conviction, however, that they will realize the hollowness of the philosophy of the physical, as the western world is discovering now.

“Coming to the affairs of the Himachal Pradesh University, I would like at the outset to place on record my appreciation of the vast amount of good work done by the University in the short



Shri Virbhadra Singh delivering the convocation address

span of its life. Physical infrastructure has been built, faculty has been developed, new vistas are being explored. Much has been done.

"I would like to allay the fears of those who may have felt that the autonomy of the University is being curtailed. I assure you with all the emphasis at my command that the Government have no intention whatsoever of tampering with the independent functioning of the university. Academic freedom is a valued asset and it cannot be nibbled at without detriment to the quality of higher education. The recent legislation has been promoted entirely by a sincere desire to improve the internal functioning of the university. Some of the forums were unwieldy in size; these have been reduced to manageable dimensions. Others did not have a balanced composition; balance has been restored by giving appropriate weightage to the faculty, the affiliated colleges, students, non-teaching staff, public men and the government. There was a feeling that the statutes and ordinances were being changed too often in order to favour individuals; so the procedure for amendment has been made more stringent. This is all that has been done and there is nothing here that may cause anxiety to any of you. Of course, there are always people whose main occupation is rumour-mongering and character assassination. It is best not to listen to them.

"I feel strongly that a University has to become the intellectual fulcrum of the society which it serves. It cannot afford to dissipate its energy in petty policking, internecine battles, tension and unrest. It has to be a haven of peace, with a calm and unruffled atmosphere, where scholarly pursuits can be carried on with ease. It has to be a centre of excellence, of intellectual brilliance, a repository of knowledge and wisdom, which is capable of giving advice to government, business, industry and the professions on policies, programmes and projects. It should have a galaxy of agile

minds, intellectually superior, which can outshine every other segment of society. If this aim is to be achieved, we have to assemble the best faculty from wherever it is available and to provide funds and facilities in abundant measure. It is our dream that the Himachal Pradesh University will live up to the expectations of the people of Himachal and earn a name for itself throughout the country.

"A university cannot remain immune from the influences of the larger society which supports it. In Himachal, we have come a long way from these days when Simla was the seat of the Imperial Government and the hills were only a sylvan retreat for the high and mighty in the land. With the dawn of freedom, there was an awakening in these remote, inaccessible, heavily forested areas.

"Dr. Yeshwant Singh Parmar, the builder of modern Himachal, was a statesman with vision. He rightly laid emphasis on the opening out of the interior through the construction of roads. He exhorted the people to adopt new occupations like horticulture, growing of potatoes and off-season vegetables, hops and mushrooms, rearing of Jersey and Holstein cows and merino sheep, and weaving of carpets, shawls and other handicrafts. The result is a Himachal which is a beaconlight for other hilly areas in the country.

"It was but natural that our need for higher education should have kept pace with the rapid progress of the economy. The demands upon the educational system grew and the Himachal Pradesh University was established. It was soon realised that considerable importance had to be accorded to the achievement of academic and research excellence in agriculture and allied activities. That is how the Agricultural Complexes at Palampur and Solan started. After a short while it became clear that only a separate Agricultural University would be able to meet the need for technically qualified personnel.

"I am happy to note that both the universities have contributed immensely to the economic, social and intellectual advancement of the State. The two universities have had a history of amicable relationship and have developed several areas of complementarity. I am sure that both would travel together in an atmosphere of cooperation and harmony and serve as tools for the accelerated development of the State in all spheres.

"I will now refer briefly to the educational policy of the State Government. In the present climate of rising expectations, there are two conflicting demands being placed on the educational system. On the one hand, people clamour for more schools, more colleges, more universities and rightly so because education is the passport to a higher standard of living and to social mobility. On the other hand we are faced with the problem of the deteriorating quality of education, which is an amalgam of lack of infrastructural facilities, over-crowded classrooms, outmoded textbooks and harassed faculty. A time has come when we may have to cry halt to this race for quantity and concentrate instead on the quality of education being imparted in our schools and colleges.

"Despite the efforts of more than three decades, we have still not been able to change our curricula to fit our own needs. There are many vestiges of the colonial era, from the bondage of which we have not yet been able to free ourselves completely.

"To take one example, our school textbooks give certain superficial biographical sketches of a few leaders of the freedom struggle, but the younger generation has grown up without any knowledge or comprehension of the great historical movement that is the foundation of modern India. There is an urgent need to prepare textbooks which give a graded introduction to the freedom movement in all its aspects, so that our students imbibe the virtues of patriotism and self-respect.

"Another instance is the relationship between man and his environment. Whole civilisations have vanished merely because people destroyed the ecological balance around their habitations. Today when we clear forests for building roads, dams, electric transmission lines, housing projects etc. we often forget that an un-bridled forest clearance programme can convert a living mountain into a desert. Conservation has, therefore, to become an integral part of the curriculum right from the primary classes and to continue upto the university level.

"Such instances can be multiplied. Population control, national integration, democratic principles, dignity of labour, moral and spiritual values—all these are subjects which have got to be taught to the younger generation if our nation is to survive and become great.

"That brings me to the last part of my presentation. Ultimately when we plan our educational system, devise our curricula and write our textbooks, what we are aiming at is the transformation of every student into our conception of the ideal man. All of us have our own conceptions and it would be wrong on my part to assert that any of these conceptions is better or worse. I would only place before you my conception of the ideal man.

"My ideal man is a person who takes good care of his body because it is the vehicle which carries the rest of his personality, but does not pamper it. He acquires wealth and power through legitimate means, not only with the purpose of living in moderate comfort and with some degrees of freedom in action, but primarily to use his wealth and power for the service of his fellowmen. His emotions are trained and within his control; they provide the impetus to his actions. His mind is emancipated. He has the courage to think for himself. He has got rid of superstitions and shibboleths. At the same time, he sees the intrinsic truth in ancient myths, the truth that is deeper than mere

facts. He is not a cynic who believes that only the wicked prosper and the virtuous are doomed. He knows that life is a constant struggle between good and evil, not only outside us, but within each of us. He has imbibed the honesty, the pragmatism, the scientific temper, the dignity, the patriotism and the humanism of the west, and rejected its glamour and glitter, its hankering for sex and violence. He respects the customs and traditions of his society. He is proud of his country and prepared to give his all for its sake. He is disciplined, not because of fear or external controls, but by depth of understanding, wakeful alertness and heightened awareness. This is his religion and his God.

"Today, when the nation is going through troubled times, we should not remain helpless spectators of what is happening. These are the birth-pangs of a new civilization. The old feudal order is dying out along with its social inequity, rigid casteism, ritualistic religion and economic exploitation. An ega-

litarian, secular, democratic, modern India is emerging. There is conflict between the old and the new. This is natural. But we should not be disheartened. No one from outside is going to help us. We have to stand on our own feet and fight with all that we have. We should analyse ourselves at every step and judge objectively. Are we siding with the old vanishing order or the newly emerging one? Are we with the exploiters or the exploited?

'And in this struggle, you, the students who are emerging from the university today, have to be in the vanguard. When you encounter corruption, don't throw up your hands in despair. Do something about it. When you see inefficiency, don't curse. Do something about it. We have to rebuild India. No one can pass the buck to another. Each one of us, wherever he is, has to participate in this noble national endeavour. May God grant us all the vision, the understanding, the courage and the patience to fulfil our historic roles in this struggle.' □

UNIVERSITY NEWS

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UP introduces pension scheme for varsity teachers

The UP Government has introduced a pension scheme with gratuity benefits for university teachers in the state retiring on January 1, 1984 or later.

An official spokesman said that university teachers will be entitled to pension at par with and at the same rate as admissible to Government employees.

He said, the Government order, issued recently allows the choice to university teachers to opt for the new rules for securing pension, family pension and gratuity benefits, or to remain under the old rules under which they are entitled to their general provident fund money alone sans pension.

The Government order also provides for a family pension to the teachers in case they die in harness.

University teachers, opting for the new rules will be entitled to a pension at par with Government employees on their superannuation at the age of 60 years, till alive or to a family pension at the same rate on death in harness.

Under the other category, university teachers would be entitled to a family pension on death at par with normal pension plus gratuity if they opt for retirement at the age of 50 years. The gratuity will be admissible only when a teacher agrees to forego the Government share from his general provident fund money payable to him.

The spokesman said that pension will be calculated at 50 per cent of basic pay if it is up to Rs 1,000 plus an additional 45 per cent of the next Rs 500 increase in basic pay and 40 per cent as pension if the basic pay is above Rs 1,500. The Government order also imposes a maximum limit of Rs 1,500 payable as pension per month.

The spokesman said the gratuity payable is also subject to a maximum of sixteen and a half month's

salary on the maximum service period of 33 years reckoned for its calculation and a minimum of 12 months salary provided the university teacher agrees to forego the Government contribution from the general provident money payable to him.

PU seminar on social structure and development

The Department of Sociology, Panjab University organised a 3-day seminar on Social Structure and Development from December 21 to 23 1983 which was attended by about 30 social scientists from all over the country. The purpose of the seminar was two-fold -- to share research with professional colleagues from other parts of India and to benefit from their works and to sensitize policy makers and development planners to the current issues.

Prof V S D Souza, a well-known social scientist delivering the key-note address called for a radical restructuring of society through the Gandhian path of "Satyagraha". Prof D'Souza pointed out that the concept of economic development which was advanced as a panacea for all major problems of mankind had not worked. There was therefore, a rethinking on the concept of development itself. Development meant making the individual self-reliant and creative. It stood for changing the personality of the individual.

Rejecting the existing theories of functionalism and conflict, Prof D Souza, said that "Satyagraha" is based on truth and love which are related to altruism and sociability inherent in man. Underlining the need for restructuring society Prof D Souza said that though the conflict theory suggested a restructuring, it proposed violent revolution to achieve it.

Prof R C Paul, Vice-Chancellor of Panjab University, who inaugurated the seminar said

that the society has paid a social price for development in the form of heightened tensions and conflicts. Development brings about a "revolution of rising expectations" which, if not accompanied by rapid developmental gains, could lead to frustrations and aggressive behaviour.

Open merit scholarships at MDU

An amount of about Rs 50 lakhs has been set apart by the Maharshi Dayanand University, Rohtak in the form of scholarships to be awarded to meritorious students. The University has instituted an ambitious scheme of open-merit scholarships, without strict insistence on Haryana domicile though, other things being equal preference may be given to a candidate who comes from Haryana. 50% of the scholarships are reserved for rural candidates whose education for the first eight years has been in a village school. The deserving students can be given any number of scholarships. Scholarships are available for the undergraduate courses (Pre University, Pre-Med, Pre-Engineering, B.A., B.Sc., B.Com. (Hons.) and Masters courses in the subjects of English, Hindi, Sanskrit, Economics, Political Science, History, Physics, Chemistry, Mathematics, Sociology, Zoology and Psychology.

Upto ten scholarships are available for candidates joining M.B.B.S. courses at the Medical College, Rohtak.

The amount of scholarship is Rs 250 - per month. The candidates can also be given fee concession and grants for books in addition to the scholarship in exceptional cases. The scholarship will be tenable for the entire duration of the course. The aspirants for scholarship are required to have a minimum of 60% marks in the respective qualifying examination. Also the scholars will have to live in a university hostel so that they participate in the corporate life of the academic community.

Shanti sena camp at Gandhigram

A two-day Shanti Sena Camp was organised at Gandhigram Rural Institute recently for the organisers of the Village Peace Brigades of the Gandhi District Movement. 50 volunteers drawn from the villages of Reddiarchatram, Vedsandur, T. Kallupatti, Batlagundu, Vadamadurai and Sanarpatti Blocks of Tamilnadu participated in the camp. The objectives of the two-day camp were (i) to explain the concept of Shanti Sena and (ii) to give details regarding how to organise it, and plan the work programme.

In his presidential address Dr M. Aram, Vice-Chancellor, laid emphasis on the inner growth of an individual for attaining perfection in human life. He pointed out that an ideal Shanti Sainik should aim at achieving inner perfection. Shanti-Sena is the need of the hour and it was the gift of Gandhiji and Vinobaji for India and mankind in general, he added.

Inaugurating the Camp, Rev. R. R. Keethan stressed the need for Shanti Sena in the present international context. He opined that there is no dearth of good people in the world to think in terms of love and affection.

Sri N. Markandan, Co-ordinator of Extension activities of the Institute narrated how the village Shanti Sena is being organised in the service villages of G. R. I.

Sri V. Selvaraj, Co-ordinator of Gandhi District Movement, described the efforts being made to transform the villages and towns of Madurai district on Gandhian lines. He felt that the village must be self-reliant in order to lessen their dependence upon outside agencies for development. Mrs. Minotti Aram, President, Lakshmi Mahalir Mandram, while enumerating the qualities of a Shanti Sainik, underlined the importance of devotion to God,

observance of truth and non-violence in one's day-to-day life and endeavours.

Dr N. Radhakrishnan, Chief Organiser of Shanti Sena demonstrated by means of a skit how a conflict situation could be resolved peacefully. Later the Shanti Sainiks were imparted training in yogasanas and rural sports.

World Punjabi conference at Patiala

'Efforts should be made to know and understand other languages and cultures while nursing, developing and enriching the Punjabi language and culture', remarked Dr S. S. Johl, Vice-Chancellor, Punjabi University while presiding over the welcome function for the delegates of World Punjabi Conference and a seminar on Punjabi Folklore organised by the Department of Punjabi of the University recently.

Dr Johl said that he had received assurance from the Birmingham University for setting up of a Punjabi and Sikh studies Centre in Birmingham.

Dr Johl informed the delegates that Punjabi was the medium of instructions in all the colleges affiliated to the University and it was a compulsory subject there.

Dr V. N. Tiwari, M. P., Chairman Organizing Committee of

the World Punjabi Conference, pleaded for establishing of an archives for the preservation of Punjabi culture at the Punjabi University. Dr Tiwari said that there were enough means for the promotion of Punjabi Culture. The Chairman announced that the committees of the World Punjabi Conference will be established at district, national and international level.

Six publications brought out by the World Punjabi Conference were presented by Dr Tiwari to Dr Johl.

Dealing with the various hurdles in the promotion of Punjabi language, Dr Gurcharan Singh Arshi in his paper 'The problems of Punjabi Culture' dwelt upon the political division of Punjab in 1947 and consequent variations in the Punjabi language. He feared that there was a crisis to the identity of the Punjabi Culture at this juncture.

Dr Harbhajan Singh of Delhi in his paper 'Punjabiya Da Lok Mohandira' dwelt upon the two books brought out by Mr. Tomoyo Mazhaki, a Professor of Punjabi from Japan who spoke fluent Punjabi.

Mr. Amarjit Singh Dhillon, Director, Planning and Development, shared with the delegates of the World Punjabi Conference, various projects undertaken by the University for development of the Punjabi language.



Prof. Dalip Kaur of Punjabi University welcoming the delegates to the World Punjabi Conference

Protonic thermocurrents discovered in Cochin University

A new physical phenomenon termed as 'protonic thermocurrents' or 'thermally stimulated protonic currents' was discovered in the Solid State Electronics Laboratory of the Cochin University's Department of Physics.

The phenomenon was observed by Dr C P Girijavallabhan and Dr U Syamaprasad during their extensive studies on the electrical properties of a crystal of lithium ammonium sulphate. Specimens in the form of single crystal of this material when polarised at very low temperature and then steadily warmed, gave bursts of electric currents. The investigators conclusively proved that these currents were due to the migration of the protons liberated from the ammonium group in the crystal.

The above findings are of considerable significance in the context of the wide interests of workers in laboratories all over the world in a class of material called superionic conductors which have excellent potential in connection with the development of solid state batteries, solar energy converters, thermal switches etc.

The details of the above discovery have appeared in the American research journal "Physical Review" (Vol 26B).

International Seminar on Saiva Siddhanta

An International Seminar on Saiva Siddhanta is to be organised at Dharmapuram, Tamil Nadu, India, during 3rd, 4th and 5th February, 1984 under the joint auspices of Bharathidasan University, Tiruchirapalli and Dharmapuram Adhinam, Dharmapuram.

This International Seminar on Saiva Siddhanta is meant to bring together eminent scholars in Saiva Siddhanta all over the world by providing a forum at an international level for the participating scholars to discuss the following aspects: (1) Saiva Siddhanta and other Indian Philosophical Thought (2) Saiva Siddhanta and other Asian Schools of philosophy, and (3)

The Relevance of Saiva Siddhanta to the modern world including the West.

More than twenty delegates from foreign countries like England, Malaysia and Sri Lanka have already registered and nearly another hundred delegates from within the country and places like the United States of America, Singapore, Hawaii, South Africa, etc. are expected to participate in the Seminar.

Re-structuring of courses at Madurai Kamaraj

The re-structurisation of the courses under the Open University System and the redrafting of the syllabi are in the offing. With effect from June 1984, these courses will comprise:

- (1) an Introductory Course for a duration of one year from June to March
- (2) a Pre-Foundation Course for a duration of one year ending with a university examination and

- (3) a Foundation Course for a duration of two years (Foundation Course I year and Foundation Course II year), each year ending with a university examination.

The syllabi of the above courses have been brought on par with those of the Tamil Nadu Secondary and Higher Secondary Education courses.

The Syndicate of the university has extended the period of study to one year from 1984 onwards and approved the redrafting of the Open University System syllabi. A proposal to prescribe four optional subjects under part III of the foundation courses I year and II year from 1984-1985 has also been approved.

A health village for Manipal and medicare for Udupi

The establishment of a 'health village' in which all facilities to promote the health of young and old people would be available, the extension of medicare to the people of Udupi and the

AIU to organise In-service Training Programmes for University Administrators

One of the objects of the AIU is to facilitate communication, co-ordination and mutual consultation among universities. Keeping this in view, the Association proposes to organise in-service training courses for university administrators. The President Prof R C Paul, Vice-Chancellor, Panjab University appointed a Committee consisting of the following persons to consider this matter: Dr S N Mehrotra, VC, Jodhpur; Dr B M Shukla, VC, Gorakhpur; Dr G Ram Reddy, VC, APOU, Hyderabad; Shri Kirpa Narain, VC, GB Pant University; Prof S Sampath, Director, IIT Kanpur and Dr R K Poddar, Ex-VC, Calcutta. It has been recommended that two programmes may be arranged in a year: (i) for Controllers of Examinations, Deputy Registrars and Assistant Registrars and (ii) for Registrars and Finance Officers.

In order to have an effective participation, the group may consist of 20 persons and the duration of the course may be one to two weeks. The sponsoring universities may meet the travel, board and lodging expenses of the participants during their training period and the officials may be treated on duty.

These programmes would offer the trainees an opportunity to discuss current problems of their universities and their solution. In order to pool the experience of different university systems, such programmes would provide a forum for exchange of views and meaningful inter-action among such officers who do not get opportunities to meet their counterparts in other universities.

For efficient organisation of these programmes and courses, collaborations would also be sought from the Indian Institute of Public Administration, National Institute of Planning and Administration and other member universities and organisations located in Delhi. These programmes may be organised in Delhi or in other cities at the convenience of the host university.

strengthening of the Udupi centre of Kasturba Hospital were among the subjects discussed by the Supreme Governing Body of the Academy of General Education in Manipal recently

The members of the Governing Body were informed that the government had recognised Kasurba Hospital, Manipal, as an independent institution. While the proposal to have a separate hospital for the K M C in Mangalore was under consideration, the establishment of a 150-bed hospital in Udupi would be taken up soon for implementation. The setting up of the 'health village' would also receive urgent attention.

The income ceiling of Rs 4,550 for being eligible for 'medicare' benefits, had been raised to Rs 6,000 to cover a larger number of people, it was stated.

Endowment for N S S in Bharathidasan University

Perhaps, for the first time in the country, an Endowment for National Service Scheme has been created in the Bharathidasan University.

On the occasion of the First Anniversary of the University organised by the citizens of Tiruchirappalli, among others, an Endowment for Rs 30,000 - in the name of Hon'ble Chief Minister of Tamil Nadu, Thiru M. G. Ramachandran, for National Service Scheme has been instituted.

This Endowment will be used for presenting an annual award for the best functioning N S S College in this University. A Committee has been constituted to select the best functioning N S S College in the University for award in the current year. The Committee will evolve the criteria for the award and also the form of the award to be presented.

Additional seats in M.Sc. at PAU

The Academic Council of Punjab Agricultural University approved the creation of additional seats in the Master's Programme in the Department of Veterinary Pharmacology (1),

Veterinary Medicine (1), Food Technology (2) and Botany (3).

The Council also decided to divert two seats from M Sc (Horticulture) to M Sc (Landscaping and Floriculture).

Panjab University to discontinue Honours in Economics

In order to conserve resources and let the faculty concentrate on post-graduate teaching and research, it has been decided by the Syndicate of Panjab University to abolish the Honours School System in the Department of Economics. As a consequence, no admissions to the First-Year class of B A (Honours School) would be made in 1984.

Commonwealth Secretary-General visits BHU

Mr S. Ramphal, Secretary General of the Commonwealth visited the Banaras Hindu University after conclusion of the Commonwealth Conference at Delhi.

The Vice-Chancellor of Banaras Hindu University Prof Iqbal

Narain accorded a warm welcome to the Commonwealth Secretary General at his residence. Mr Ramphal visited Bharat Kala Bhavan on the campus. He discussed various academic activities and faculty programmes with the Vice-Chancellor. During their talk Prof Iqbal Narain discussed various academic exchange programmes and co-operation with the Secretary General among the Commonwealth nations.

Mr Ramphal disclosed that the last conference of the Commonwealth Universities had constituted a Committee of the Vice-Chancellors for the exchange programmes of the scholars at the University level among the member nations. Recommendations of the committee have been received recently which will be implemented soon.

Mr Ramphal took interest in the economic and cultural developments of Banaras. He said that during his visits to India, he met scholars and people for the acquaintance of various things.



Mr Ramphal receiving a gift from Prof Iqbal Narain.

Gorakhpur University students union elections —with a difference

Even before the happy memories of the University Silver Jubilee convocation could fade, the University students got busy with their elections. The elections to the students union passed off peacefully without any untoward incident. Many new things happened this year in the University, some of them a pleasant surprise. This year after a decade or so the University buildings were shining and not a single slogan or name was found written anywhere. This was a happy development in the sense that it saved the University about Rs 85 thousand which it had to spend on white-washing and painting etc after Union elections last year. This was also the first year when a large number of colourful banners and hoardings were seen all-around not only on the campus but practically all over the town. This was also said to be the first year when the girl students came out to take charge of the microphone and moved about in cars and jeeps canvassing for one candidate or the other.

Calicut Varsity's School of Drama

One of the recent additions to the University of Calicut and situated at Dr John Matthai

We Congratulate

- * Professor S V Chittibabu, Vice-Chancellor, Annamalai University has been reappointed as Vice-Chancellor of the Annamalai University for another term of three years with effect from 24.12.1983
- * Shri N Raghava has been appointed as Vice-Chancellor-in-charge of Andhra University with effect from 15th December, 1983
- * Prof S Bhattacharya has taken over as Vice-Chancellor of Calcutta University with effect from 31st December, 1983

Centre, Aranattukara, at the outskirts of Trichur Town, Kerala State, is the School of Drama. The Department at present has a three year Degree Course in Theatre Arts termed as B T A (Bachelor of Theatre Arts) consisting of six semesters. The course is basically designed to be a practical oriented one, giving adequate place for the study of Kerala's tribal rural and sophisticated traditional forms. The first semester is completely devoted to the study of Kerala Theatre and the 'Natyasastra' tradition which is practically being taught by the Master Artistes in the field. This is followed by European theatre upto the 19th century, Malayalam Theatre, Contemporary Indian Theatre and Modern World Theatre. There are three optionals offered from the 3rd semester: Direction, Acting and Children's theatre and the merit of the stu-

dents decided mainly on the basis of their project productions. A Film Appreciation Course in the third semester is conducted with the assistance of the Film and Television Training Institute, Pune. A Film Training at the studio of the Kerala State Film Development Corporation is part of the last semester. Each student should submit, in the last semester, a dissertation on any subject connected with his studies. Acting exercises are compulsory for all, which include Kalaripayattu, Yoga and Circus besides the generally accepted exercises. The maximum number in a batch is 15 and an aptitude test is conducted before admission.

The ultimate aim of the University, as well as its Faculty and Board of Studies is to develop this department into a Performing Art Centre in Kerala.

AIU News

Gandhiji University wins women team title at Trivandrum

Inter-University Athletics Meet was recently concluded at Trivandrum. It was encouraging to note the Gandhiji University Kottayam (latest addition to the membership with the AIU) claiming the Women's Team Title with a tally of 39 points in its maiden appearance. Calicut University with 37 points took second place and Mangalore University occupied third place by capturing 35 points.

Guru Nanak Dev University, de-throned reigning champions — the hosts Kerala University to win the Men Team title with a tally of 38 points relegating them to finish third with 29 points. Punjabi University, Patiala gained the second spot by securing 30 points.

Prem Singh, a student of Guru Nanak Dev University, Amritsar was adjudged the best Men Ath-

lete while women's best athlete was Shiny Abraham of Gandhiji University. Vandana Rao of Mangalore University won the 100 meters and 200 meters for women bringing a doubled victory for her University.

Combined universities Volleyball (Men) team raised for the first time

Combined Universities Volleyball players will be seen in action for the first time in the Federation Cup Volleyball Tournament being held at Calicut from 7th to 12th February, 1984. Best eight teams from the country are chosen by the Volleyball Federation of India to participate in the above Tournament. The trials for selecting the Combined Universities Team are being held at Trivandrum on 25th & 26 January, 1984. The team so selected will undergo a Coaching Camp at Trivandrum before its participation in the Federation Cup.

News from Agril. Varsities

PAU strategy for 1984

Dr Sukhdev Singh, Vice-Chancellor of the Punjab Agricultural University said that the University was passing through a grave financial crisis on account of fast rate of inflation and rising prices. He further said that to combat the financial crises and cut imposed by the State Government, strict economy measures were being adopted in the University. Despite financial hardships, the construction work in land was being completed. A cotton technology laboratory, seed testing laboratory, sheds for small animals had been completed. A cafeteria was fast coming up. More residential houses could be constructed when funds were available.

The Vice-Chancellor was addressing the faculty on the installation ceremony of the newly elected Punjab Agricultural University Teachers' Association (PAUTA) recently.

Giving an outline of the research programmes the Vice-Chancellor said that a research station on dry land farming with the World Bank Assistance had been established in the Kandi area of Hoshiarpur District which when completed would be a model for the entire country. The research conducted at this station would benefit those areas where tube-well or canal irrigation was not available. Another research station was being established at Bhatinda to conduct specific research on cotton and brackish water for which financial aid was awaited from the State Government for the purchase of land and the construction of infrastructure. Research on tick fever disease which harmed the hybrid animals would also be taken up on priority basis.

The Vice-Chancellor called upon the faculty to raise the academic standard of Post-graduate level and motivate the students to compete for the

Indian Administrative Service, Defence Services and for jobs in the commercial banks.

Dr G S Sandhu, President of PAUTA assured that the faculty would try its best to uphold the high traditions of the University and raise its academic standards. He urged that the University should encourage the young scientists and more facilities be provided to them.

HAU scientists develop new wheat variety

Scientists of Haryana Agricultural University have evolved a new wheat variety WH-291 for late sown conditions. This variety is significant in view of the wide acceptance of the paddy-wheat and cotton-wheat crop rotation by farmers of Haryana.

This variety is an improvement on Sonalika variety released during the year 1968 which is the only variety adoptable for late sown conditions not only in Haryana but in the whole of the country. But as Sonalika variety has become highly susceptible to brown rust, which does extensive damage, it is unsafe to grow it on a large scale.

The new variety WH-291 evolved by the HAU scientists has been identified for cultivation in the north-western plain zones of the country. According to Dr R P S Tyagi, Director of Research, it has yielded 34.8 quintals per hectare against 33.7 quintals per hectare of Sonalika. During the current year, this variety was tested extensively in three sets of trials of various locations in Haryana. In these tests besides Sonalika, another variety HD-2285, also identified for late sown conditions, was also included. Results showed the superiority of the new variety in yield over both HD-2285 and Sonalika indicating yield advantage of 5.4 quintals per hectare and 3.9 quintals per hectare respectively over these varieties. It out yield-

ed Sonalika by a significant margin in Gujarat also.

Indian society of soil sciences institutes a medal

The Indian Society of Soil Sciences of Haryana Agricultural University (HAU) has decided to institute a gold medal for the best M Sc student in soil sciences. The medal in the name of Dr S D Nijhawan, an eminent soil scientist, would be awarded every year at the Annual Convocation.

The institution of the medal of Dr S D Nijhawan Gold Medal was approved at a recent meeting of the Board of Management of HAU.

Virology conference at HAU

'A multi-disciplinary approach in research is necessary to conquer the virus diseases of men, animals and plants', said Dr C M Singh, Deputy Director (Rtd), Indian Veterinary Research Institute (IVRI). He was speaking at the inaugural function of the Virological Conference recently. He further said that many problems in the area of agriculture, veterinary and medical fields like polio and measles in men and foot and mouth disease in animals are some of the major problems and their control will go a long way in improving health and happiness of mankind. He emphasised that scientists should take up research work on virus diseases which are transmitted by fungi and attempts should be made to establish culture collection of viruses as well as sera bank. In view of the present problems scientists should not depend entirely on human virology alone.

Earlier the conference was inaugurated by Dr S P Raychaudhary, (Rtd) Head of Division, Indian Council of Agricultural Research and eminent plant pathologist. This conference was organised at HAU in collaboration of the Indian National Science Academy and the Department of Science and Technology, Govt of India.

40 delegates from all over India took part in the conference.

AIU LIBRARY

Established in 1965, the AIU Library has acquired over the years a valuable collection of books and documents on Higher Education. Among the topics prominently represented are Educational Sociology, Educational Planning, Educational Administration, Teaching & Teachers' Training, Examinations, Economics of Education and Country Studies. Developing fields of Adult Education, Continuing Education and Distance Education, and Educational Technology are also well stocked. The Library is particularly strong in its collection of reports whether they are on the setting up of different universities or on the state of Higher Education. Files of Annual Reports of different universities are also maintained. Readers are kept informed of the latest acquisitions through our column 'Additions to AIU Library'.

The Library also receives about a 100 periodical titles on Higher Education. All these are indexed regularly and a select list appears every month as 'Current Documentation in Education'.

Doctoral Degrees awarded during the preceding month are reported as 'Theses of the Month' while registrations made for such degrees are flashed as 'Research in Progress'. Bibliographies are also compiled and supplied on demand.

Research scholars and students of education are welcome to use these resources. The Library is situated at 17-B, Indraprastha Marg, New Delhi-110 002. It is open from 10 a.m. to 5 p.m. Monday through Saturday except Second Saturday. Access can also be had through inter library loan for which requisition must be made through your Librarian.

A list of Research Scholars Registered for Doctoral Degrees of Indian Universities

PHYSICAL SCIENCES

Mathematics

1. Goswami, Kailash Chandra. *Density topology and its study on some abstract mean spaces - A study in topology for analysis*. Gauhati U.
2. Kalita, S.C. *Groups of automorphisms of compact Riemann surfaces*. Gauhati U. Dr. B.P. Chetia.
3. Patra, Kuntala. *Meta-Abelian groups of automorphisms of compact Riemann surfaces*. Gauhati U.

Physics

1. Alok, Prabhakar. *Composite magnets in relativistic and non-relativistic theory*. U. Delhi. Dr. K. Datta.
2. Bartwal, Kanwar Singh. *Solid state electronics studies of structural and electronic behaviour of layered crystals*. BHU Varanasi. Prof. O.N. Srivastava.
3. Das, S.N. *Resistive transition of thin superconducting films*. U. Delhi. Dr. P.N. Dheer.
4. Khattri, Ravinder Kumar. *Molecular spectroscopy and molecular biophysics*. U. Delhi. Dr. M.K. Machwe.
5. Misra, Abani Kumar. *Some studies of scaling and scale breaking in particle physics*. Gauhati U. Dr. D.K. Choudhury.
6. Pandey, R.K. *Some problems in atomic and molecular physics*. U. Delhi. Dr. R.P. Saxena.
7. Patgiri, K.K. *Fission track ages of some of the pegmatites and granites from Gauhati and its surroundings*. Gauhati U. Dr. T.D. Goswami and Dr. C.C. Bhattacharyya.
8. Patra, Manasa Kumar. *Group of representations*. U. Delhi. Dr. K.C. Tripathy.
9. Puttanna, H.S. *Low temperature physics. Resistive transition of superconducting films*. U. Delhi. Dr. P.N. Dheer.
10. Rahman, K. *Ionospheric studies based on geostationary satellite observations from Gauhati*. Gauhati U. Dr. (Mrs.) M. Devi.
11. Rastogi, Alok Kumar. *Investigation of dielectric guides of microwave frequencies*. U. Delhi. Prof. G.P. Srivastava and Dr. K.N. Tripathy.
12. Shukla, Ashok Kumar. *Electronic transport properties of semiconductors*. U. Delhi. Dr. P.C. Mathur.
13. Singh, Nand Pal. *Studies on polycrystalline silicon solar cells*. U. Delhi. Dr. B.K. Das and Dr. Raj Rup.

14. Singh, Thoudam Nandabibu. *Fission track studies in some minerals and water from the North East India*. Gauhati U. Prof. K.M. Pathak and Dr. P.K. Choudhury.

15. Vena, Soma. *Some aspects of group representations in physics*. U. Delhi. Dr. K.C. Tripathy.

16. Vikram Singh. *Computer aided study of α -behaviour in gas mixtures*. U. Delhi. Dr. P.S. Grover.

17. Vinod Kumar. *Thin film semiconductor transducers*. BHU Varanasi. Dr. Rama Swami.

18. Yogesh. *Multiparticle production in deep inelastic processes in Parton model*. HPU, Shimla. Dr. R.P. Baisai.

Chemistry

1. Das, Pranab Ivoti. *Studies on coupling of aryl diazonium chlorides with indole in acidic and alkaline medium*. Gauhati U. Dr. P. Sharma.
2. Das, Sanjib. *Chemical examination of medicinal plants of North East Region of India*. Gauhati U. Dr. R.P. Sharma and Dr. (Mrs.) A. Choudhury.
3. Dutta, Uttara. *Synthetic study with heterocyclic compounds*. U. Delhi. Dr. V.K. Ahluwalia.
4. Geetha, C.N. *Organometallic chemistry*. U. Delhi. Dr. R.K. Multani.
5. Mattu, Sushma. *Co-ordination chemistry*. U. Delhi. Dr. S.K. Sindhwan.
6. Mercykutty, P.C. *Phosphines complexes of metals*. U. Delhi. Dr. P.N. Kapoor.
7. Tyagi, Sunita. *Some new organometallic compounds of molybdenum*. U. Delhi. Dr. R.K. Multani.

Earth Sciences

1. Bhattacharya, Sharmah Aruna. *Studies on the Lekadong limestone and Lekadong sandstone (Silher limestone stage) of the shelf formation with special reference to the sedimentology of the limestone Cherrapunjee area, Meghalaya*. Gauhati U. Dr. D.N.D. Goswami.
2. Choudhary, Chandan Kumar. *Chambal river bed land*. U. Delhi. Prof. V.K. Verma.
3. Das, Asit Kumar. *Petrological study of the precambrian rocks of the Khanapara-Sonapur area, Kamrup Distt. Assam*. Gauhati U. Dr. M.N. Rao.
4. Goswami, H.C. *A Study on seismic risk in the North-East Indian region*. Gauhati U. Dr. S.K. Sarma.

5 Hazarika, Lalit Kumar *A study of the precambrian rocks of the Mairang Area, Meghalaya* Gauhati U Dr C C. Chattacharyya

6 Jain, Aklesh Kumar *Chenab river geomorphology* U Delhi Prof V K Verma

7 Naug, Bhaskar Jyoti *Fluvial ichnology* U Delhi Dr K Tandon

8 Pathak, Basant Kumar *Soil, geology and land use investigations in Beas catchment area* Delhi Prof V K Verma and Dr R A Chansarkar

9 Ravindra Kumar *Study of neogene benthic Foraminifera from Andaman Nicobar Islands* U Delhi Dr V Sharma

10 Sil Debabrata *A Study of the ore environment in the northern sector of the Pur-Banera Belt, Bhiwara District, Rajasthan* U Delhi Dr Mihir Deb

11 Srivastava, S K *Extraction geochemistry of pelagic sediments associated with deep sea manganese nodules and their implication to the genesis of nodules* U Delhi Dr C S Moonwal

12 Wahi, Sanjay *Ore geology* U Delhi Dr M Deb

Engineering & Technology

1 Rajarao Yesoda *Dual mode T R T* BHU, Varanasi Prof R K Jha and Prof D S Venkateswarlu

BIOLOGICAL SCIENCES

Anthropology

1 Roy Tapash Kumar *Genetics of total tricus counts in man* Gauhati U Dr Renuka Das

2 Sakhibombi Devi, K *Physical growth in the Meitei, Shatriya and muslim girls of Imphal Manipur - A cross-sectional study* Gauhati U Dr B M Das

Biochemistry

1 Bhuyan Adity *Reproductive performance and biochemical profile of female albino rat treated with indigenous plant of N L region* Gauhati U Dr P Goswami

2 Cameotra, Swarnjit Singh *Studies on the mechanism of hydrocarbon utilization by microorganisms* Gauhati U Dr H Singh

3 Raja, P S *Study of the effect of carcinogen on some of the enzymes in growing chick embryo* Gauhati U Dr P Goswami

4 Sharma Rakesh *Hormone and vitamin interactions in regulation of rooting in stem cutting* HPU, Simla Dr V K Rai

5 Vyas, Purnima *Possibility of using serum hepatoglobin estimation as a tool in identification of certain conditions* Devi Ahilva Indore Dr A P Bhandarkar

Botany

1 Batt, Rajendra Prasad *Systematics and ecobiology of some Agaric families* HPU, Simla Dr T N Lakhanpal

2 Biswas Santi Kumar *Studies on infection and rotting of Lycopersicon fruit by Alternaria Sp. with emphasis on disease reaction and enzyme substrate relationship* Gauhati U Dr D N Baishya

3 Dubey, Shashi *Ecophysiological studies of some forest trees* H S Gour, Sagar Dr S P Vajpai

4 Jain, Rashmi *Chemotherapy of mycotic otitis externa caused by some species of Aspergillus and Penicillium* H S Gour, Sagar Dr S C Agarwal

5 Nandi, Mita *Ultrastructural and histochemical studies of some food legumes* U Delhi Dr C B Seghal

6 Ropianghana *Studies on the genetics and breeding behaviour in rice* Gauhati U Dr B Goswami

7 Sadik, Yasmin *Studies on the role of phenolic compounds in the disease resistance in plants* H S Gour, Sagar Dr K M Vyas

8 Sengar, Anil Kumar *Studies on allelopathy among weeds and crops* H S Gour, Sagar Dr S P Vajpai

9. Thomas, Sophy *Embryology of angiosperms* U Delhi Prof R N Kapil

10 Tiwari, Archana *Eutrophication and pollution studies in Sagar Lake* H S Gour, Sagar Dr S P Vajpai

11 Tripathi, Subhash Chandra *Primary production and nutrient uptake by Eucalyptus plantations* BHU, Varanasi Dr G N Choudhary

Zoology

1 Arunasmithastri, A S *Endocrinology* U Delhi Dr K Muralidhar

2 Chauhan, Usha *Studies on the mating behaviour and cytological mechanisms of dichotomous spermatogenesis in potato tuber moth, Phthorimaea operculella Zeller* HPU, Simla Dr L R Verma

3 Chhaya Devi, Chintama Neni *Factors regulating melanin synthesis in human skin* U Delhi Dr K Muralidhar and Dr A Ramaiah

4 Kalita, Jatin *Vitamin A metabolism in fresh-water fish with reference to its role in growth and occurrence* Gauhati U Dr U C Goswami

5 Madhusudhana Rao, K *Hypothalamo-hypophyseal complex and related problems of Indian and Chinese carps* BHU, Varanasi Dr A V Natarajan and Prof A G Sathyanasan

6 Mahapatra Rita *Sterols in insects* U Delhi Dr H C Agarwal

7 Rajendra Kumar J *Endocrinology (biochemical)* U Delhi Dr K Muralidhar

8 Samuel, Thomas *Organochlorine pesticide residue dissipation in environment* U Delhi Dr R C Aggarwal and Prof M K K Pillai

9 Samuel, Rachel *Effect of some environmental factors on the biology of Lasioderma serricorne F (Coleoptera: Anobiidae)* U Ker Trivandrum Dr V K K Prabhu

10 Sarma S S S *Zooplankton ecology* U Delhi Dr T R Rao

11 Sushma Rani *Studies on inhibin and inhibin like substances* U Delhi Dr K Muralidhar

12 Umesh Kumar *Cytogenetic studies on insects* U Delhi Prof S R V Rao

13 Vijay Lakshmi *Role of accessory glands in insect reproduction* U Delhi Dr S S Seghal

Medical Sciences

1 Agrawal, Sharmila *Stress stress reaction and adaptation pattern in relation to different body types* BHU, Varanasi Dr K N Udupa and Dr G P Dubey

2 Dhawan Alok *Controlled drug delivery and targeting* H S Gour Sagar Prof K C Verma

3 Khubchandani Murlidhar *Formulation and product development of suspensions semisolids and aerosols* H S Gour, Sagar Prof S N Sharma

4 Lodhi, Narayan Singh *Preparation and evaluation of some gastric antacids* H S Gour, Sagar Shri R K Upadhyay

5 Rana Avtar Chand *Phytochemical and pharmacological studies on medicinal plants with special reference to their use in fertility control* H S Gour Sagar Dr D D Santhani

6 Sharma, Krishna Kumar *The concept of anupan in Ayurveda* BHU, Varanasi Prof L V Guru and Dr R H Singh

7 Yadav, Mange Ram *Synthesis of heterosteroids of medicinal interest* Pb U Chandigarh Prof Balkishan Singh and Dr Dharam Paul

Agriculture

1 Aziz, Chhote Lal *A Study of impact integrated rural development programme of District Allahabad, U P Kanpur* U Dr V B Singh

2 Barua, Anjan *Studies on certain plant metabolites and essential oil content with reference to Curvularia verruciformis* Gauhati U Dr D N Bordoloi and Dr C M Seima

3 Bujarbarua Aparna *Studies on relative growth, development and productivity of certain economic plants* Gauhati U Dr P P Wanman

4 Choudhury, S *Studies on the growth, yield and oil quality of Ocimum gratissimum Linn* Gauhati U Dr D N Bora and Dr P P Wamanan

5 Mohammad Motiur Rahman *Induction of mutation by X-ray irradiation with special reference to male sterile and reciprocal translocation in jute, Corchorus capsularis L* Gauhati U Dr L C Goswami

6 Sarma, B Devi *Physiological studies on the effect of plant growth regulators on the germination and vegetative growth of radish Raphanus sativus* Gauhati U

7 Sarma, Prafulla Chandra *Cytogenetical and morphological studies on some triploid tea, Camellia sinensis L produced from tetraploid-diploid crosses* Gauhati U Dr H P Bezbaruah and Dr L C Goswami

8 Singh, Vinod Kumar *A study of the diffusion and adoption of agricultural innovations in the district of Gorakhpur, Eastern U P* Kanpur U Dr V B Singh

Horticulture

1 Abdul Mazid *Studies on the genetic parameters and yield components in apple, Malus sylvestris Mill* Kanpur U Prof R K Sharma

2 Gupta, P K *Studies on morphology, growth, yield and chemical composition of large cardamom, Anomum subulatum Roxb* Kanpur U Prof R K Sharma

3 Jagdish Narain *Control of vegetative growth in grapevine Vitis vinifera L. by spray application of growth regulators by tipping and tapping of shoots* Kanpur U Dr S D Khanduja

4 Katiyar, Ram Saran *Genetical and correlation studies among yield and its components in bitter melon Momordica charantia L* Kanpur U Dr A Prasad

5 Pal Radhey Shayam *Studies on nitrogen and potash nutrition in guava in relation to yield and quality* Kanpur U Dr R P Srivastava

6 Pandey Uma Chander *Studies in the genetic parameters of yield and its components in guava Psidium guajava L* Kanpur U Dr A Prasad

7 Saklani, Upendra Dutt *Effect of light intensity and plant growth regulators on the growth, yield and quality of tomato* Kanpur U Dr R P Srivastava

8 Sarkar Govind Kumar *Studies on nitrogen and potassium fertilization of litchi in relation to growth, yield and quality* Kanpur U Dr R P Srivastava

9 Sharma, I P *Investigations on growth attributes and genetical parameters with yield in carrot, Daucus carota L varieties* Kanpur U Dr A Prasad

10 Singh, J B *Studies on varietal intensity, their yield and economic components in mango, Mangifera indica L* Kanpur U Dr A Prasad

11 Singh, Ravindra Nath *Effect of phosphate levels, culture and time of sowing on growth, yield and quality of pea, Pisum sativum L* Kanpur U Prof R K Sharma

12 Srivastava, Ashok Kumar *Studies on floral biology, palynology, fruit set and fruit quality of Psidium molle B P guenée Swp Friedrichsthall anum NDz, P cattleinum var lucidum Sab P polycarpum Al Anderson* Kanpur U Dr Gauri Shankar

13 Srivastava Sant Kumar *Nutritional studies on fenel (saunf) Foeniculum vulgare Mill* Kanpur U Prof B K Sharma

14 Sukla, Shambhu Nath *Effect of nitrogen, phosphorus and potassium on the growth and yield of turnip Brassica repa L* Kanpur U Prof R K Sharma

15 Tripathi, Swarajya Prakash *Studies on nitrogen and potash nutrition of plum in relation to growth yield and quality* Kanpur U Dr R P Srivastava

16 Upadhaya Shiv Narain *Studies on the growth yield and quality of red delicious apples as affected by different interstocks* Kanpur U Dr R P Srivastava

17 Vijay Shanker *Root-stock studies on Sinaguri orange* Kanpur U Dr R P Srivastava

Veterinary Science

1 Singh Devendra Nath *Nutritional studies on growing ruminants* BHU Varanasi Dr V N Bhargava

A list of Doctoral Theses Accepted by Indian Universities

PHYSICAL SCIENCES

Mathematics

1 Balachandra Rao, S *Linear and nonlinear stability of flows through porous media using special analysis* Bangalore U

2 Basu Juthika *On problems related to the stochastic models in thermodynamics* U Calcutta

3 Basu Manabendranath *Some features of turbulence erodic principle and corresponding mapping phenomena* U Calcutta

4 Rai, Vijay Shankar *A study of extended Bernoulli, Euler and Eulerian polynomials* BHU, Varanasi

5 Saha Bhuluranjan *Some aspects of transport processes in turbulence* U Calcutta

6 Shri Kant *A generalized Appell-function of two variables and the polynomials $A(x, 1)$* BHU, Varanasi

7 Singh Mahesh Prasad *Some contributions to the general theory of relativity* LNMU Darbhanga

8 Singh, Ram Kishore *Some contributions to the fixed point theory* Mag U Bodh Gaya

9 Singh S P *Some problems on approximation of functions by positive linear operations* U Roorkee

Statistics

1 Mandal, Nripeskumar *Response surface designs for locating the optimum* U Calcutta

2 Panda Rajendranath *Contributions to response surface designs* U Calcutta

3 Singh Kaushalendra Kumar *Some analytical models for couple fertility and their applications* BHU, Varanasi

Physics

1 Agrawal Anil Kumar *Mechanism of energy transfer processes between trivalent rare earth ions* Kum U Nainital

2 Balakrishnan I S *Some physical problems in clinical radiation dosimetry including design of certain treatment aids for radiotherapy* U Ker Trivandrum

3 Bhattacharjee Basana *X-ray and spectroscopic studies on some liquid crystals* NBU, Rajarammohunpur

4 Bora Bhubaneswar *Studies on low frequency (few MHz) radio signals associated with extensive air showers* Gauhati U

5 Choudhury Chandrakala *Semiconductor selective coatings and their applications in Cylindrical solar collectors operating under concentrated flux* IIT Delhi

6 Choudhury Ira *Ionic conduction in polar dielectric liquids* NBU, Rajarammohunpur

7 Das Saktipada *Investigation on some characteristic properties of glow discharge* NBU, Rajarammohunpur

8 Datta, Dhurjati Prasad *Analyticity of Schrodinger energy levels for Quark-confining potentials* NBU, Rajarammohunpur

9 Datta Rathindra Kumar *Studies on the dielectric properties of some polar liquids and salt solutions at radio and ultrahigh frequencies* NBU Rajarammohunpur

10 Enjeti Lakshmi *Reactive sputtering of gallium nitride thin films and the electrical characterisation of GaN/GaAs metal insulator semiconductor diode structures*, IIT, Delhi

- 11 Jha, Biswanath *Studies on liquid crystals* NBU, Rajarammohunpur
- 12 Joseph, Porathur Vareed *Inter annual variability of Indian summer monsoon rainfall* U Poona
- 13 Khatrī S S *Motional states of NO_2 and other ions in K1 single crystals* NEHU
- 14 Lakshminarayana, Donepudi *Studies on ternary thin films of AgSbTe_2 and AgSbSe_2* SPU, Vallabh Vidyanagar
- 15 Maiti, Chittaranjan *Studies on the dynamics of layer crystals* U Calcutta
- 16 Patil, Nalini Nema *A study of heart rate variability technique and its application to detect chronic foetal distress* U Poona
- 17 Porwal, Nandlal *Dielectric investigation of some compound semi-conductors at low-high and micro-wave frequencies* RDV Jabalpur
- 18 Saha, Swapankumar *Studies on the ionospheric radio wave propagation characteristics of standard frequency signals in the h f band at Calcutta* U Calcutta
- 19 Sharma, Ami Chand *Dielectric properties on semi conductors* U Roorkee
- 20 Singh, Rama Janma *Characterization and generation of states at the Si-SiO₂ interface* BHU, Varanasi

Chemistry

- 1 Arya R S *Studies on the metal complexes of amino acids* U Roorkee
- 2 Bandyopadhyay, Pinaki *Studies on the chemistry of palladium* U Calcutta
- 3 Bandyopadhyay Saumitra *Studies on the constituents of Aristolochiaceae species* U Calcutta
- 4 Bansal Amla *Physico-chemical studies of inorganic colloidal precipitates* U Roorkee
- 5 Basu Baul Tusharshubhra *Multinuclear organotin complexes of polyfunctional ligand* NBU Rajarammohunpur
- 6 Borade Ramesh B *Synthesis and characterization of Zsm-5 zeolites* U Poona
- 7 Datta Samiranti *Studies on metal complexes and metalloproteins* U Calcutta
- 8 Desai Jagdishchandra Amrutlal *Synthesis and study of 4-quinazolinone dyes* SPU Vallabh Vidyanagar
- 9 Ganguli Prakash Babu *Reactions of aromatic hydrocarbons over Zsm-5 zeolites* U Poona
- 10 Karna Sashi Ranjan Prasad *Ab initio Mo calculations of ESR hyperfine couplings* BHU Varanasi
- 11 Khanapure Subhash P *Synthetic studies on aromatic steroids* U Poona
- 12 Kittur Mohammad-Iqbal Hatailsha *Studies in the lupul field* Kar U Dharwad
- 13 Kolhe Vinayak Chavdas *Studies on transition metal complexes of some bidentate hydroxyquinone derivatives as models for biological electron transfer reactions* U Poona
- 14 Maheshwari J M *Studies on potential antimicrobial compounds* Bhavnagar U
- 15 Mallick Asim Kumar *Studies on biocidal properties of some organotin coordination compounds: Fungicidal and phytotoxic properties* NBU Rajarammohunpur
- 16 Mukhopadhyay, Prabirkumar *Studies on plant products* U Calcutta
- 17 Pathan, M D *Studies on some compounds of medicinal interest* Bhavnagar U
- 18 Phadtare Shashikant Krishnan *Studies in synthesis of nitrogen heterocycles amino acids and peptides* U Poona
- 19 Prem Lata *Experimental and theoretical studies on the electronic spectra of some disubstituted benzenes* Pb U Chandigarh
- 20 Rastogi, Manju *Mechanism of oxidation of organic compounds* RDV Jabalpur
- 21 Ravi Kumar V *Studies in gas-solid catalytic reactions* U Poona
- 22 Rawat P S *Effect of trace microelements on biochemistry of vegetables of Kumaun Hills* Kum U Nainital
- 23 Sen Bjoy Krishna *Studies on saturated molecular systems using bond orbital approach* NBU, Rajarammohunpur
- 24 Shabih Ahmad *Corrosion of austenitic stainless steels in phosphoric acid* U Roorkee
- 25 Sharma, Anita *Physico-chemical studies of metal complexes of sulphophthalein dyes* U Roorkee.

- 26 Singhal, Neeta *Therapeutics in quinazoline series* Pb-U, Chandigarh
- 27 Subramanian, Lakshmi M *Studies in cyanoethylation* U Jammu
- 28 Vinod Kumar *Molecular interactions in mixtures of low molecular weight species* MDU Rohtak

Earth Sciences

- 1 Chandra, Prabhat Chandra *Genelectrical studies for aquifer delineation in lower Maner basin of Andhra Pradesh and the Ganges-Tons interstream area of Uttar Pradesh* BHU, Varanasi
- 2 Gupta Om Prakash *Some studies on analog and numerical modelling in electromagnetic prospecting* BHU, Varanasi
- 3 Khare, Madhumas Chandra *Sedimentological and hydrological studies of part of Durg and Raipur Districts, M P, India* U Roorkee
- 4 Rajamanickam, G Victor *Geological investigations of off-shore heavy mineral placers off Konkan Coast, Maharashtra, India* ISM, Dhanbad
- 5 Sharma, R N *Geochemistry and genesis of the copper sulphide deposit of Malanskhanda, District Balaghat, M P* U Roorkee
- 6 Singh, S P *Palaeogeography and sedimentation history of the Delhi supergroup: A study from the Bayana sub-basin, North Eastern Rajasthan* U Raj, Jaipur
- 7 Singh V N *Ground motions due to buried sources* U Roorkee

Engineering & Technology

- 1 Agarwal V C *Studies on the characterisation of the meandering streams* U Roorkee
- 2 Amit Bhadra *Analysis of multireactor degradation of solid substrates into acids and methane* IIT Delhi
- 3 Asawa Girdhari Lal *An experimental investigation of radial turbulent flow between parallel plates* U Roorkee
- 4 Bagchi A K *Snow melt runoff in Beas basin using satellite image* U Roorkee
- 5 Chara A M *Optimal sequencing and operating policies of multipurpose multireservoir basin projects* U Roorkee
- 6 Chauhan R L *A simulation study of tunnel excavation* U Roorkee
- 7 Das Minmoy *Long-term behaviour of reinforced concrete portal frames under cyclic thermal loading* IIT, Delhi
- 8 Grover, Dinesh *On modern approaches towards the design aspects of the central processor unit* U Roorkee
- 9 Jain J K *Secondary effects in cable roofs* U Roorkee
- 10 Jain Nitin Kumar *Thyristor control of shpring induction motors* IIT, Delhi
- 11 Javakumar N S *A study of kinetics and dynamics of hydrolysis of acetic anhydride in batch and continuous flow stirred tank reactors* IIT, Delhi
- 12 Kundu Subir *Microbial conversion of cellulose to ethanol* IIT, Delhi
- 13 Nandi Paresnath, *Catalytic hydridesulfurisation of petroleum fractions* U Calcutta
- 14 Rao M V V *A 2-D study of dispersion of pollutants through porous media* U Roorkee
- 15 Samraj Kingston S *Static and dynamic analysis of gravity in dams on faulted foundations* IIT, Delhi
- 16 Setty, K R N *Design analysis and characterization of flexible pavements* U Roorkee
- 17 Shamsuddin Ahmad *Analysis of chopper control D C motor drives including effects of some mechanical factors* U Roorkee
- 18 Sharda Nalin Kant *Microprocessor control of three-phase cycloconverter: Investigations on design, implementation and performance* IIT, Delhi
- 19 Shihorwala T A *Re-use of tertiary treated domestic sewage in Bombay for industrial water supply* Devi Ahilya, Indore
- 20 Singh S S *Studies in Mn-Cr-Cu wear resistant white cast irons* U Roorkee
- 21 Singh, Shailendra Kumar *Coprecipitation of base metals with hydrous Fe and Mn oxides: their properties and application to pollution control* JNU Delhi

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Applications are invited for the undermentioned posts. The benefit of Provident Fund/Pension, Dearness Allowance, House Rent Allowance and City Compensatory Allowance are admissible according to University Rules. The retirement age of University Employees is 60 years. The appointment will be made on one year probation. Higher starting salary within the grade is admissible to specially qualified and experienced candidates.

Applications will be entertained on the prescribed form duly supported with a Bank Draft or Crossed Indian Postal Orders of Rs 750 (or Rs 200 for the candidates belonging to Scheduled Caste/Scheduled Tribes) in favour of the Registrar, Banaras Hindu University towards application fee. Application forms will be supplied free of cost by the Registrar (Selection Committee Section), Banaras Hindu University Varanasi -221005 on receipt of Rs 0.90 paise stamped self-addressed envelope of 23 cm x 10 cm size. Candidates called for interview for these posts will be paid actual Railway fare by the second class plus reservation charges for sleeper, if paid, and/or actual Bus fare from the present residence bothways by the shortest route as per University rules. No other expenses will be paid.

Applications for each post be sent separately alongwith attested copies of certificates in support of the qualifications and experience mentioned in the application and be addressed to the Registrar (Selection Committee Section), Banaras Hindu University, Varanasi-221005.

Incomplete application in any respect will not be entertained for consideration.

Those who are in service should apply through proper channel. M.O. or Cheque will not be accepted towards application fee.

Reservation A reservation of 15% in the case of Scheduled Castes and 7½% in the case of Scheduled Tribes will be made in the category of teaching posts upto the level of lecturers only.

The last date for receipt of application in the Office of the Registrar (Selection Committee Section) Banaras Hindu University either by post or by hand will be **15th February, 1984**. No applications shall be entertained after the last date from external in-service employees and the candidates residing abroad.

Note

1. Number of vacancies are tentative and can vary according to needs.
2. Panel may be drawn for temporary appointment of Lecturers against the future vacancies.

INSTITUTE OF AGRICULTURAL SCIENCES

Grade

Professor Rs 1500-60 | 800-100-2000-125/2-2500

Reader Rs 1200-50-1300-60-1900

Lecturer Rs 700-40-1100-50-1600

All India Coordinated Research Project for Dryland Agriculture

1 **Professor-cum-Chief Scientist** (Agronomy/Soil Science/Agric-Engg / Genetics & Plant Breeding) (One)

Qualifications

Essential An eminent scholar with published work of high quality actively engaged in research. About ten years experience of teaching and/or research. Experience of guiding research at doctoral level.

OR

An outstanding scholar with established reputation who has made significant contribution to knowledge.

Desirable Ability to provide leadership to multi-disciplinary research project with particular reference to Dryland Agriculture.

2 **Reader-cum-Agronomist** (Agronomy) (One)

3 **Reader-cum-Soil Physicist** (Soil Science/Soil Science & Agric Chemistry/Soil Physics) (One)

4 **Reader-cum-Agricultural Engineer** (Agricultural Engineering) (One)

5 **Reader-cum-Plant Breeder** (Genetics & Plant Breeding) (One)

All India Coordinated Agronomic Research Project

6 **Reader-cum-Agronomist** (Agronomy) (One)

All India Coordinated Pulse Improvement Project

7 **Reader-cum-Agronomist** (One)

8 **Reader-cum-Plant Pathologist** (One)

9 **Reader-cum-Entomologist** (One)

10 **Reader-cum-Microbiologist** (One)

All India Coordinated Wheat Improvement Project

11 **Reader-cum-Wheat Breeder** (One)

All India Coordinated Maize Improvement Project

12 **Reader-cum-Sr Maize Breeder** (One)

All India Coordinated Project on Biological Nitrogen Fixation

13 **Reader-cum-Geneticist** (Two)

Qualifications (for all the above posts of Readers)

Essential Good academic record with a Doctoral degree or equivalent published work. Evidence of being actively engaged in (i) research or (ii) innovation in teaching methods or (iii) production of teaching materials.

About five years experience of teaching and/or research provided that atleast three of these years were as Lecturer or in an equivalent position.

This condition may be relaxed in the case of candidates with outstanding record of teaching/research.

Desirable

1 (for the posts from item No 2 to 5)
(a) Research experience on Dryland Agriculture as evidenced by published work/applied contribution.

(b) Ability to formulate and conduct research in respective field of Dryland Agriculture.

(c) Knowledge of experimental designs and modern methods of experimentation.

2 (for the post at item No 6 only)

(a) Research experience in Agronomy as evidenced by published work/applied contribution.

(b) Ability to formulate and conduct research in the field of Agronomy.

(c) Knowledge of experimental designs and modern methods of experimentation.

3 (for the posts from item No 7 to 10 only)

(a) Research experience on pulse crops as evidenced by published work/applied contribution.

(b) Ability to formulate and conduct research in respective fields or pulse crops.

(c) Knowledge of experimental designs and modern methods of experimentation.

4 (for the post at item No 11 only)

(a) Research experience in wheat improvement as evidenced by published work/applied contribution.

(b) Ability to formulate and conduct research in wheat improvement.

(c) Knowledge of experimental designs and modern methods of experimentation.

5 (for post at item No 12 only)

(1) Research experience in maize improvement as evidenced by published work/applied contribution.

(2) Ability to formulate and conduct research in maize improvement.

(3) Knowledge of experimental designs and modern methods of experimentation.

6. (for the post at item No. 13 only)

- (a) Research experience in Microbial Genetics/Genetics of Nitrogen Fixation.
- (b) Ability to formulate and conduct research in biological nitrogen fixation
- (c) Knowledge of experimental designs and modern methods of experimentation.

Note

- 1 For post at item No 10: Doctorate Degree in Microbiology or Botany/Plant Pathology with specialisation in Microbiology
- 2 For post at item No. 13 : Master and Doctorate Degree in Genetics and Plant Breeding/Agricultural Botany/Botany with specialisation in Microbial Genetics

Explanation

For determining "good academic record" the following criteria shall be adopted

- (i) A candidate holding a Ph D Degree should possess atleast a second class Master's degree, or
- (ii) A candidate without a Ph D degree should possess a high second class Master's degree and second class in Bachelor's degree, or
- (iii) A candidate not possessing Ph D degree but possessing second class Master's degree should have obtained first class in the Bachelor's degree

All India Coordinated Research Project for Dryland Agriculture

- 14 Lecturer-cum-Junior Scientist (Agronomy) (One)
- 15 Lecturer - cum - Junior Scientist (Soil Science) (Soil Science/Soil Science and Agric Chemistry/Soil Physics) (One)
- 16 Lecturer-Cum-Junior Scientist (Agril Engg) (One)
- 17 Lecturer-Cum-Junior Scientist (Pl Breeding) (Genetics & Pl Breeding) (One)
- 18 Lecturer - Cum - Junior Scientist (Agril Meteorology) (One) (Geophysics with specialisation in Agric Meteorology/Agril Meteorology/Agronomy with specialisation in Agric Meteorology)
- 19 Lecturer-Cum-Junior Scientist (Demonstration) (One) (Agronomy/Extension)

All India Barley Improvement Project

- 20 Lecturer-Cum-Junior Breeder (Genetics & Pl Breeding) (One)
- 21 Lecturer-Cum-Junior Agronomist (Agronomy) (One)
- All India Coordinated Pulse Improvement Project
- 22 Lecturer-Cum-Junior Scientist (Breeding) (Six)

23. Lecturer-Cum-Junior Scientist (Microbiology) . (One)

24 Lecturer-Cum-Junior Scientist (Entomology) (One).

25 Lecturer-Cum-Junior Scientist (Plant Pathology) (One)

26 Lecturer-Cum-Junior Scientist (Agronomy) (One)

27 Lecturer-Cum-Junior Statistician (One)

All India Coordinated Wheat Improvement Project

28 Lecturer-Cum-Junior Scientist (Breeding) (One)

All India Coordinated Maize Improvement Project

29 Lecturer-Cum-Junior Scientist (Breeding) (One)

30 Lecturer-Cum-Assistant Maize Agronomist (One)

31 Lecturer-Cum-Junior Scientist (Agronomy) (One)

All India Coordinated Rice Improvement Project

32 Lecturer-Cum-Junior Rice Breeder (One)

All India Coordinated Oilseed Improvement Project

33 Lecturer-Cum-Junior Breeder (Safflower) (One)

34 Lecturer-Cum-Junior Scientist (Breeding) (One)

35 Lecturer-Cum-Junior Scientist (Agronomy) (One)

Breeder Seed Production for National Seed Project

36 Lecturer-Cum-Assistant Breeder (Seeds) (One)

Qualifications (for all the above, posts of Lecturers except the post of Lecturer at item No 16)

Essential

- (a) A Doctorate's degree or research work of an equally high standard, and
- (b) Good academic record with atleast second class (C in the seven point scale) Master's Degree in a relevant subject from an Indian University or an equivalent degree from a foreign University

Desirable

- 1 For the posts from item No 14 to 19 : Adequate Research experience in the field of specialisation with special reference to Dryland Agriculture
- 2 For the posts at item Nos 20 and 21 Adequate research experience in the field of specialisation with

special reference to Barley Improvement

- 3 For the posts from item No 22 to 27 Adequate research experience in the field of specialisation with special reference to pulse crops
- 4 For the posts at item No 28 Adequate research experience in the field of wheat breeding
- 5 For the posts from item No 29 to 31 Adequate research experience in the field of specialisation with special reference to maize crop
- 6 For the post at item No 32 Adequate research experience in the field of rice breeding
- 7 For the posts from item No. 33 to 35 Adequate research experience in the field of specialisation with special reference to safflower crop
- 8 For the post at item No 36 Adequate research experience in the field of specialisation

Having regard to the need for developing inter-disciplinary programme, the degrees in (a) and (b) above may be in relevant subjects

Provided that if the Selection Committee is of the view that the research work of a candidate as evident either from his thesis or from his published work is of very high standard, it may relax any of qualifications prescribed in (b) above

Provided further that if a candidate possessing a Doctor's Degree or equivalent research work is not available or is not considered suitable, a person possessing a good academic record, (weightage being given to M Phil or equivalent degree or research work of quality) may be appointed provided he has done research work for atleast two years or has practical experience in a research laboratory/organisation on the condition that he will have to obtain a Doctor's degree or give evidence of research of high standard within eight years of his appointment, failing which he will not be able to earn future increment until he fulfils these requirements

Explanation

For determining "good academic record" the following criteria shall be adopted

- (i) A candidate holding a Ph D degree should possess atleast a second class Master's degree, or
- (ii) A candidate without a Ph D degree should possess a high second class Master's degree and second class in the Bachelor's degree, or
- (iii) A candidate not possessing Ph D degree but possessing second class Master's degree should have obtained first class in the Bachelor's degree

2 Persons having secured marks more than the mid-point of the prescribed minimum marks for passing an examination in the second division and the prescribed minimum marks for passing an examination in the first division by a University shall be deemed to have passed that examination in the high second class

Note

- 1 For posts at item Nos. 22, 28, 29, 32 to 36 Master's Degree in Genetics and Plant Breeding/ Agricultural Botany/Botany with specialisation in Genetics & Plant Breeding
- 2 For post at item No 23 Doctorate and Master's Degree in Microbiology or Botany/Plant Pathology with specialisation in Microbiology
- 3 For post at item No. 27, Doctorate and Master's Degree in Statistics/ Agricultural Statistics

Qualifications (for the post of Lecturer at item No 16 only)

Essential

- (1) Master's Degree in appropriate field in Engineering/Technology
- (2) Consistently good academic record with a Bachelor's degree in Engg/Technology First Class at Bachelor's degree and/or Master's degree level
- (3) One year's relevant professional experience outside academic/research institutions

Having regard to the requirements of emerging fields of Engineering and of developing inter-disciplinary programmes, the requirements of a post-graduate degree in Engg/Technology may be waived in the cases of otherwise well qualified candidates

Provided further that if a candidate does not possess professional experience or a person possessing such experience is not found suitable, the person appointed will be required to obtain desired professional experience within a period of 5 years of his appointment failing which he will not be able to earn future increments until he fulfils this requirement

Provided still further that in case the candidates with M Tech /M E. qualifications are not found suitable for appointment, first class Engineering Graduates may be appointed subject to the condition that the candidates concerned shall have to obtain M Tech /M E. Degree within a period of 5 years failing which they shall not be confirmed and shall not be entitled for drawing further increments and till then they shall not teach the higher classes

SCHOOL OF PLANNING AND ARCHITECTURE

NEW DELHI-2

(Deemed to be a University under Section 3 of the U.G.C. Act)

Applications are invited from Indian Nationals for the following post

Deputy Registrar (One—reserved for Scheduled Castes)

Scale of Pay Rs 1100-50-1600.

Qualifications

(a) Essential

- (i) Bachelor's Degree, at least, Second Class of a recognised university or equivalent
- (ii) At least, seven years' experience of administration with abilities to control, guide and supervise executive staff at the level of the Assistant Registrar or equivalent post in the pay-scale of Rs 700-40-900-EB-40-1100-50-1300, in a Government or Semi-Government Department/Autonomous Organisation, dealing with Education/University or Educational/Research/Cultural Institution of Higher Learning
- (iii) Adequate experience in Financial Management work/Examination work, knowledge of Government rules and regulations

(b) Desirable

- (i) Master's Degree of a recognised University/Bachelor's Degree of a recognised university in Law
- (ii) Proficiency in conducting meetings of Committees and Conferences
- (iii) Abilities to adopt Government Rules, Regulations and Procedures, in a flexible manner, to the growing requirements of a public educational institution

Age limit Below 50 years for Scheduled Castes candidates

The post carries the benefits of G P Fund-cum-Gratuity - cum-Pension/C P Fund-cum-Gratuity on confirmation and Central Govt Health Scheme services on appointment. The period of probation is of one year. Allowances are as admissible to comparable posts in the Government of India except House Rent Allowance which is 20% of the basic pay

Prescribed Form of Application may be obtained from the Office of the School, on working days between 9 00 A M and 5 00 P M except Saturdays and Sundays. Applications on prescribed form, accompanied by attested copies of certificates and testimonials and a crossed Indian Postal Order of Rs 125 p drawn in favour of 'SCHOOL OF PLANNING AND ARCHITECTURE, NEW DELHI-2', should

reach the Registrar, School of Planning and Architecture, I.P. Estate, New Delhi-110002 by 6th February, 1984.

Request for the application forms must specify the name of the post and be accompanied by a self-addressed unstamped envelope of 25cm x 12cm size

Candidates from outside Delhi called for interview will be paid II Class rail fare for both the journeys (within India)

Applicants who are in the employment of Government/Semi-Government Organisations or of any Government undertaking must send their applications through proper channel

—MMG-515-DLI—

UNIVERSITY OF ROORKEE

No EST(A)/1283/A-86 (Advt) 83
Dated Jan 3, 1984

Corrigendum

In the Advertisement No 1/9/83-A-86 (Advt) dated 1-9-1983 the nature of the post of PROFESSOR, W R D T C be read as ONE REGULAR & TWO TEMPORARY

O N Chaturvedi
REGISTRAR

THE UNIVERSITY OF KASHMIR SRINAGAR

Advertisement Notice

Applications are invited for the following posts -

Professor in Political Science;
Reader in Commerce, History and Regional Geography,
Lecturer in Botany, Economics, Mongolian Studies and Sociology/Social Anthropology

The prescribed application forms can be had from the University Office on cash payment of Rs 15/- or by sending a crossed postal order drawn in favour of the Registrar, cashable at Srinagar post office alongwith a self-addressed envelope (5" x 11") with the necessary postage. An application fee of Rs 5/- is also payable which may likewise be remitted through Postal Order

The posts carry the pay scales as prescribed by the University Grants Commission

The last date for receipt of applications is February 6, 1984

Candidates are advised in their own interest to send their detailed curriculum vitae in advance

Details in respect of qualifications etc prescribed for the posts can be had from this office

Peerzada Ghulam Hassan
SPECIAL OFFICER (Admin)

HARYANA AGRICULTURAL UNIVERSITY

Advertisement No. 9/83

Applications invited for following posts. Higher start outstanding qualifications, experience and achievements. Benefits of Contributory Provident Fund and leave etc. according to University Rules. Applications of the candidates already in service must reach through proper channel upto the fixed date. Applications on prescribed form (obtainable free by sending self-addressed unstamped envelope size 23 x 10 cms to Assistant Registrar (H) HAU Hissar) to be accompanied by prescribed fee of Rs. 10/- in the form of crossed Postal Order in the name of Assistant Registrar (G) HAU Hissar payable at HAU Post Office Hissar should reach Registrar by **8-2-1984** (**23-2-1984** for candidate residing abroad). The applications received after the prescribed date will be rejected. The applicants must possess prescribed qualifications and experience on the list date for receipt of applications. However, those who have submitted their thesis (M.Sc. Ph.D.) are also eligible to apply by the list date of receipt of applications. They will be considered by the Selection Committee only if they produce the completion certificate of M.Sc. Ph.D. degree at the time of interview. The envelope containing application must be super-scribed "APPLICATION FORM FOR THE POST OF

1. Professor of Chemistry (One) Essential: (i) Second class B.Sc. (ii) Second class M.Sc. in Chemistry (iii) Ph.D. in Chemistry with specialisation in Inorganic, Organic or Physical Chemistry (iv) Ten years experience of Research Teaching out of which at least five years should be as Associate Professor or equivalent rank. Desirable: (i) Practical experience of applications of Chemistry in Crop Improvement as evidenced by published work (ii) Organisational Administrative capabilities and experience.

2. Assistant Professor (Home Management) (One) (i) Second class B.Sc. in Home Science (ii) Master's degree in the first class or with an OGPA of not less than 3.2/4.00 or equivalent in the discipline of Home Management Family Resource Management OR Second class Master's degree followed by Ph.D. in the discipline of Home Management Family Resource Management.

3. District Extension Specialist (Farm Management) (One) (i) At least second class B.Sc. (Agriculture) (ii) Master's degree in the first class or with an OGPA of not less than 3.2/4.00 or equivalent in the Agricultural Economics with specialisation in Farm Management OR at least second class Master's degree followed by Ph.D. in Agricultural Economics with specialisation in Farm Management.

4. Assistant Professor (Animal Breeding) (One) (i) At least second class B.A.Sc. & A.H. B.Sc. Dairying B.Sc. Animal Science B.Sc. Agri-

(with elective in Animal Science) (ii) Master's degree in the first class or with an OGPA of not less than 3.2/4.00 or equivalent in the discipline of Animal Breeding OR at least second class Master's degree followed by Ph.D. in Animal Breeding.

- Note** 1. For post at Sr. No. 1 one or more qualifications relaxable in case of candidates found otherwise outstanding.
2. For post at Sr. No. 1 the minimum experience of 10 years (including 5 years as an Associate Professor) is required. The above experience will be counted after a candidate obtains his M.Sc. degree. Further a period of minimum 3 years towards obtaining Ph.D. degree shall be excluded from the experience.
3. Special weightage will be given to extension experience possessed by the candidates for posts in disciplines amenable to extension.
4. For posts at Sr. No. 2, 3 & 4 persons who do not possess

Ph.D. at the time of their selection, if appointed shall not be allowed to cross the stage of Rs. 1300/- in the scale of Rs. 700-40-1100-50-1600 till they complete their Ph.D.

5. No. of vacancies mentioned against each post may vary.
6. For all posts reservation for different categories will be as per Haryana Government Rules.

Pay Scales

Sr. No. of post	Pay Scale	Total emoluments at the initial of the pay scale (exclusive of House Rent)
1	Rs. 1500-60-1800-100-2000-125 2-2500	Rs. 2570/-
2 to 4	Rs. 700-40-1100-50-1600	Rs. 1507/-

REGISTRAR

BHOPAL UNIVERSITY, BHOPAL

ADVERTISEMENT-ESTI - 83

Applications in the prescribed proforma obtainable by sending a self-addressed envelope of 24x12 cm size bearing stamps worth 00.50 paise are invited for the following posts in the Department of National Adult Education & Extension Programme, Bhopal University and in the pay scales mentioned against each with the benefit of allowances is admissible under the University rules so as to reach the undersigned on or before **31-1-1984**.

Post	No. of Posts	Pay Scale	Relevant subject in which Masters Degree is reqd.	Specialisation
Coordinator N.A.E.P.	One	1100-50-1600	Social Sciences Social Work Adult Education	Adult Education & Continuing Education
Project Officer	One	700-40-900-FB-40-1100-50-1600	-do-	-do-

Qualification & Experience

For the Post of Coordinator N.A.E.P.

1. A First or Second Class Master's Degree of an Indian University or an equivalent qualification of a foreign University in Social Sciences Social Work Adult Edn. A person with doctorate in any of these areas will be preferred.
2. Good Academic Record with doctoral degree or an equivalent published work and five years teaching research experience.
3. Experience of research teaching and/or field work of at least two years duration will be preferable.

For the Post of Project Officer N.A.E.P.

1. A first or second class Master's degree in Social Sciences Social Work Adult Education of an Indian University or an equivalent qualification of a foreign University with good academic record with doctoral degree in any of the areas mentioned above.

2. Two years experience in community work field work.

Age The age for the above posts should not be more than 35 years as on **31-1-1984**. For S.C. and S.T. candidates 40 years.

Application Fee

For the post of Coordinator N.A.E.P. Rs. 15/-

For the post of Project Officer N.A.E.P. Rs. 10/-

Candidates called for interview will be required to travel at their own expenses.

Persons in service must apply through proper channel and should produce N.O.C. if called for interview.

N.B. 1. Good Academic Record will be determined as per U.G.C. guidelines for teaching posts.

2. Posts are purely temporary and shall continue only up to the period U.G.C. Scheme & Financial Assistance continues.

Dr B.I. Sharma
REGISTRAR

**NORTH-EASTERN HILL
UNIVERSITY
LOWER LACHUMEIRE
SHILLONG-793001**

Application on plain paper are invited from Indian citizens for teaching (Professor—Pro, Reader—Re, Lecturer—Le) and non-teaching posts in different Departments and Centres of the University in its Campuses at Shillong (S), Kohima (K) and Medziphema (M), in Nagaland and Aizawl (A) in Mizoram, indicating name, address, date of birth, details of academic qualifications giving the divisions and percentage of marks at each stage beginning High School, teaching and research experience with details of institution, classes taught, areas of specialisation, full particulars of publications, certificates, testimonials, etc and no objection from employer

The specialisation are mentioned at the end of each section. In case no mention is made for any post, it is open for all specialisation in that subject. Our College of Agriculture will have B A / S Sc classes also besides B Sc (Agri) with appropriate departments in Science and Humanities

The applications accompanied by Indian Postal Order of Rs 10.00 (Rs 2.50 for ST/SC) payable to NEHU, Shillong should reach the undersigned on or before 6th Feb 1984

The posts carry the usual UGC pay scale plus substantial special benefits, in the form of special pay etc. The approximate emoluments per month at the minimum of the scale of those posted at Shillong will be Pro Rs 2455/-, Rs 2217/- and Le Rs 1436/- and for those posted in Kohima and Aizawl—Pro Rs 2600/- Re Rs 2400/- and Le Rs 1700/- plus a free house. Advance increments in the form of personal pay may be given depending on qualifications and experience. Candidates called for interview will be paid TA as per University Rules. Those selected will be eligible for joining TA.

20% of the posts of Lecturers reserved for SC/ST candidates who will be given preference other things being equal

1 School of Physical Sciences Life Sciences and Environmental Sciences

Electronics	—	Re 1
Physics	—	Pro 1, Le 1
Statistics	—	Pro 1, Re 1, Le 1
Chemistry	—	Re 1, Le 1
Bio-Chemistry	—	Pro 1, Re 1, Le 1
Zoology	—	Re 1
Geography	—	Pro 1, Le 1
Geology	—	Le 1 (K)

For Lecturers post see also our College Section below

Specialisation Electronics — Any branch of electronics preferably Instru-

mentation Technology. Physics—Pro. Nuclear Physics Theory Le; Nuclear physics experimental Chemistry—Any branch of Organic Chemistry Zoology—Environmental Biology/Ecology Others—Any branch

2 School of Social Sciences, Language and Education

Anthropology	—	Pro 1, Le 1
Sociology	—	Le 1
Education	—	Pro 3, (K1, A1, S1) — Re 4 (A2, K2) — Le 3 (S1, K1, A1)
Philosophy	—	Re 1
Economics	—	Pro 1 (A), Re 4 (S2, A2)
Commerce (K)	—	Pro 1, Re 2, Le 1
History	—	Re 1, Le 1
Public Administration (A)	—	Pro 1, Re 3, Le 1
English	—	Pro 1(A), 1(K), Re 4 (A2, K2)
Linguistics	—	Pro 1(K), Re 1(K), Le 1(K)
Khasi	—	Re 1, Le 1
Psychology	—	Re 1, Le 1

For Lecturers posts see our College Section below

Specialisation Anthropology — Cultural Anthropology Economics — Micro/Macro Economics Theory 1 Rural Development Re (S) Economic Theory/Classical Political Economy/Planning and Policy/Quantitative Economics/Public Economics Re(A) Rural Development / International Trade / Economic Planning History—Medieval Indian History/Non-Indian/ Modern Indian History Philosophy—Indian—Philosophy Commerce—Re/Le Cost and management Accounting Income Tax Law and Practice Banking and Financial Management Public Enterprise Management Khasi—Comparative literature English—Re (S1, A1) Linguistics, other open

Education Technology (A)	Re 2
Continuing Education (S)	Re 2
Rural Development Rural Development (M)	Pro/Re 2
Creative Arts	Re/Le 3
School Mathematics and Science (S)	Pro/Re 3

Note The level of positions in Pro/Re/Le will depend on suitability of the candidates

Specialisation Education Technology — Preferably use of Mass media for one post Continuing Education—Distance Education/Use of Mass Communication Media in Education Rural Development—Any of the Social Sciences with experiences in Rural Development/ Agriculture with Extension or Rural Development Creative Arts—Music/Performing Arts/Dramatics Paintings with distinct Sciences and Humanities stream

School Mathematics and Science—Interest and work in School Mathematics or Science (Physical or Biological)

4 Colleges

(a) College of Agriculture, Medziphema, Nagaland

Pro Agronomy (1), Soil Conservation (1)

Re Statistics 1
Le Agronomy, Plant Pathology, Mathematics, Statistics, Physics, Chemistry, Zoology, Botany, English, Sociology, Economics (One each)

Specialisation Statistics—Re Geometric design of experiments Plant Pathology—Le Field Crops

(b) Pachhunga University College (Aizawl) (Upto Honour level)

Le Forestry—1, Physics—1

Qualification

Pro Essential An outstanding scholar with established reputation and significant contribution to the subject

OR

- Doctorate in the subject or equivalent
- Ten years teaching experience of post graduate classes or fifteen years teaching experience including five years of post graduate classes or ten years Post Doctoral Research experience and guidance

Readers Essential

- Doctorate in the subject (any subject for Continuing Education) OR equivalent
- Five years teaching experience with at least three years of post graduate classes Seven years with five years honours classes OR five years post doctoral research work for Continuing Education equivalent work in Continuing Education

Lecturers Essential

- Consistently good academic record with first or High Second class Master's degree in the relevant subject
- Doctoral Degree or equivalent

OR

M Phil with at least a second class Master's Degree Candidates not holding an M Phil degree and having atleast a second class Master's Degree and a first class for general and second class for SC/ST candidates Degree (BA/B Sc/B Com) may also be considered if suitable candidates are not available They may be offered Research Associateship with stipulation to acquire M Phil/Ph D within Three/Five years

Mrs. M R Mawlong
REGISTRAR